

Department of Legislative Services
Maryland General Assembly
2026 Session

FISCAL AND POLICY NOTE
First Reader

House Bill 40 (Delegate Charkoudian)
Environment and Transportation

Public Utilities - Transmission Lines - Advanced Transmission Technologies

This bill requires an application for a Certificate of Public Convenience and Necessity (CPCN) for the construction of an overhead transmission line to include (1) evidence that the applicant considered, during its internal planning process, specified transmission planning processes and (2) an analysis of the selected transmission line route. The Public Service Commission (PSC) may not take final action on such a CPCN application until it gives due consideration of evidence that specified alternatives have been considered by the applicant. By December 1, 2026, and every four years thereafter, each owner or operator of an overhead transmission line must submit a report to PSC containing specified information related to transmission congestion. The bill also makes a related change to the definition of “qualified generator lead line.”

Fiscal Summary

State Effect: Special fund expenditures for PSC increase by approximately \$500,000 annually beginning in FY 2027, under the assumptions discussed below; PSC special fund revenues increase correspondingly from assessments imposed on public service companies. The Department of Natural Resources and the Office of People’s Counsel can likely handle any increase in workloads with existing budgeted resources.

(in dollars)	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
SF Revenue	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
SF Expenditure	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Net Effect	\$0	\$0	\$0	\$0	\$0

Note: () = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (-) = indeterminate decrease

Local Effect: Some local governments may incur minimal costs associated with additional evaluations of proposed transmission line projects. However, the bill is not anticipated to materially affect local government finances or operations.

Small Business Effect: Minimal.

Analysis

Bill Summary:

Definitions

“Qualified generator lead line” means an overhead transmission line *and any associated advanced transmission technology* designed to carry, *or support the carrying of*, 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.

The bill defines “advanced transmission technologies” as grid-enhancing technologies, high performance conductors, or energy storage used as transmission.

“Grid-enhancing technology” means hardware or software that increases the capacity, efficiency, or reliability of existing transmission systems. It includes (1) a system that uses real-time or forecasted weather and operating conditions to determine the transfer capacity of transmission systems; (2) technology that modulates circuit impedance or other electrical properties to reroute power flows and relieve congestion; and (3) software that identifies switching configurations to reroute electricity and alleviate transmission constraints.

“High performance conductors” are defined as conductors (including carbon fiber conductors, composite core conductors, or superconductors) that (1) have a similar diameter and weight as “traditional aluminum conductor steel-reinforced (ACSR) conductors”; (2) have a direct current electrical resistance at least 10% less than traditional ACSR conductors; (3) increase the potential energy carrying capacity by at least 75% compared to traditional ACSR conductors; and (4) have a coefficient of thermal expansion of at least 30% less than traditional ACSR conductors. “Traditional ACSR conductors” means electrical cables used in overhead transmission systems that consist of a central core of galvanized steel wires surrounded by strands of aluminum.

Certificate of Public Convenience and Necessity Applications for the Construction of an Overhead Transmission Line

An applicant for a CPCN for the construction of an overhead transmission line must include evidence in its application evidence that the applicant considered, as part of its internal planning process, any local, State, or federal government transmission planning processes and any transmission planning processes required by PJM Interconnection, LLC, including:

- alternatives to the proposed transmission line;
- an analysis of advanced transmission technologies and whether their use will enhance the value of the new lead line, leading to increased ratepayer value through efficiency and avoided costs;
- alternative routings;
- technologies or modifications to one or more electric distribution systems in the State that could avoid the need for the transmission line;
- the cost to ratepayers;
- resource adequacy, energy efficiency and demand response, and the impact of the project on the environment;
- a review of an integrated electric transmission-distribution system to address the need for the transmission line; and
- any other information that PSC considers appropriate.

Additionally, the applicant must include an analysis of the transmission line route selection, including (1) risks associated with the cost estimates; (2) cost containment efforts; (3) construction schedule; (4) acquisition of land and rights-of-way; (5) outage coordination; and (6) the applicant's experience working with communities and stakeholders on route consideration.

Approval of a Certificate of Public Convenience and Necessity Application for the Construction of an Overhead Transmission Line

In addition to existing requirements, PSC may take final action on a CPCN application for the construction of a new overhead transmission line only after due consideration of evidence that alternatives have been considered by the applicant (in accordance with the bill's requirements).

Reporting Requirements on Owners/Operators of Overhead Transmission Lines

By December 1, 2026, and every four years thereafter, each owner or operator of an overhead transmission line must submit a report to PSC that identifies:

- areas of transmission congestion for the immediately preceding three years and any reasonably foreseeable transmission congestion issues for the five years immediately following the date of the report;
- the projected or actual cost to ratepayers as a result of past and projected future transmission congestion;
- the feasibility and cost of using alternative means of addressing transmission congestion, including the use of advanced transmission technologies; and
- the economic, environmental, and social issues posed by the use of each alternative means of addressing transmission congestion.

If feasible, the report must also propose an advanced transmission technology implementation plan to address areas of transmission congestion identified by the owner or operator of the overhead transmission line. The bill specifies that an owner or operator may use any available data from PJM Interconnection, LLC, or other sources in completing the report.

The reporting schedule specified above is subject to modification by PSC.

Current Law: Under § 7-207 of the Public Utilities Article, unless a CPCN for the construction is first obtained from PSC, a person may not begin construction of an overhead transmission line that is designed to carry a voltage in excess of 69,000 volts or exercise a right of condemnation with the construction. However, a person that has received a CPCN from PSC for the construction of an overhead transmission line may acquire by condemnation, in accordance with Title 12 of the Real Property Article, any property or right necessary for the construction or maintenance of the transmission line.

PSC must take final action on a CPCN application only after due consideration of the recommendations of the governing body of each county or municipality in which any portion of the project is proposed to be located and the effect of the project on various aspects of the State infrastructure, economy, and environment.

For the construction of a new overhead transmission line specifically, PSC must also provide due consideration of (1) the need to meet existing and future demand for electric service and (2) the alternative routes that the applicant considered, including the estimated capital and operating costs of each alternative route and a statement of the reason why the alternative route was rejected. Additionally, PSC must require the applicant to (1) comply with specified agreements and obligations related to the ongoing operations and maintenance of the overhead transmission line and (2) identify whether the overhead transmission line is proposed to be constructed on an existing brownfields site, a property that is subject to an existing easement, or a site where a tower structure or components thereof exist and can be used to support an overhead transmission line.

As part of the CPCN process, PSC must examine alternatives to the construction of a new transmission line in a service area, including the use of an existing transmission line of another company, if the existing transmission line is convenient to the service area or the use of the transmission line will best promote economic and efficient service to the public.

For additional information on the CPCN process, see the **Appendix – Certificate of Public Convenience and Necessity**.

State Fiscal Effect: Among other things, the bill mandates new transmission congestion reports and establishes requirements for considering alternatives to new transmission infrastructure. According to PSC, the technical nature of analyzing these reports and alternatives to new transmission infrastructure necessitates the engagement of outside consultants and experts to adequately implement the bill. This estimate assumes that PSC spends approximately \$500,000 annually on consulting services to comply with the bill’s requirements. In any given year, consultant costs could be higher or lower depending on the actual volume and complexity of CPCN applications submitted for construction of overhead transmission lines.

Generally, PSC is funded through an assessment on the public service companies that it regulates. As a result, special fund revenues for PSC increase correspondingly from assessments imposed on public service companies.

Additional Information

Recent Prior Introductions: Similar legislation has been introduced within the last three years. See HB 829 of 2025.

Designated Cross File: SB 201 (Senator Brooks, *et al.*) - Education, Energy, and the Environment.

Information Source(s): Anne Arundel, Baltimore, Charles, Dorchester, and Howard counties; City of Laurel; Maryland Department of the Environment; Department of Natural Resources; Office of People’s Counsel; Public Service Commission; Department of Legislative Services

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sj/lgc

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Appendix – Certificate of Public Convenience and Necessity

General Overview

The Public Service Commission (PSC) is the lead agency for licensing the siting, construction, and operation of power plants and related facilities in the State through Certificates of Public Convenience and Necessity (CPCNs). The CPCN process is comprehensive and involves several other State agencies, including the Department of Natural Resources (and its Power Plant Research Program), and the Maryland Department of the Environment. Subject to limited exemptions described below, a person may not begin construction in the State of a generating station, qualified generator lead line, overhead transmission line designed to carry more than 69,000 volts, or certain energy storage devices unless a CPCN is first obtained from PSC.

State law provides that a “generating station” excludes:

- a facility used for electricity production with a capacity of up to 2 megawatts that is installed with equipment that prevents the flow of electricity to the electric grid during time periods when the grid is out of service;
- a combination of two or more co-located or adjacent facilities used for electricity production from solar photovoltaic systems or specified eligible customer-generators that have a maximum cumulative capacity of 14 megawatts, including maximum individual capacities of 2 megawatts (subject to satisfying other requirements); and
- a facility, or a combination of two or more facilities, used for electricity production for the purpose of onsite emergency backup for critical infrastructure when service from the electric company is interrupted and conducting necessary test and maintenance operations (subject to satisfying other requirements).

The CPCN process, detailed further below, involves the notification of specified stakeholders, the holding of public hearings, the consideration of recommendations by State and local government entities, and the consideration of the project’s effects on various aspects of the State infrastructure, economy, and environment.

In December 2020, PSC initiated a rulemaking (RM 72) to revise regulations governing CPCNs for generating stations. Updated regulations became effective in September 2021. Among other changes, the regulations contain additional information requirements – to assist in project evaluation – and allow for electronic submission and distribution of application materials.

Notification Process

Upon receipt of a CPCN application, PSC – or the CPCN applicant, if required by PSC – must immediately provide notice to specified recipients, including the executive and governing body of affected local governments, affected members of the General Assembly, and other interested persons. When providing the notice, PSC must also forward the CPCN application to each appropriate unit of State and local government for review, evaluation, and comment and to each member of the General Assembly who requests a copy.

Public Hearing and Comment

PSC must provide an opportunity for public comment and hold a public hearing on a CPCN application in each county and municipality in which any portion of the construction of a generating station, overhead transmission line, or qualified generator lead line is proposed to be located. PSC must hold the hearing jointly with the governing body of the county or municipality and must provide weekly notice during the four weeks prior to the hearing, both in a newspaper and online, and must further coordinate with each local government to identify additional hearing notification options. PSC must ensure presentation and recommendations from each interested State unit and must allow representatives of each State unit to sit during the hearing of all parties. PSC must then allow each State unit 15 days after the conclusion of the hearing to modify the unit's initial recommendations.

Public Service Commission Considerations

PSC must take final action on a CPCN application only after due consideration of (1) recommendations of the governing body of each county or municipality in which any portion of the project is proposed to be located; (2) various aspects of the State infrastructure, economy, and environment; and (3) the effect of climate change on the project. For example, PSC must consider the effect of the project on the stability and reliability of the electric system and, when applicable, air and water pollution. There are additional considerations specifically for a generating station or an overhead transmission line. For example, PSC must consider the impact of a generating station on the quantity of annual and long-term statewide greenhouse gas emissions and must consider alternative routes and related costs for the construction of a new overhead transmission line.

Exemptions Under § 7-207.1 of the Public Utilities Article

Section 7-207.1 of the Public Utilities Article specifies three conditions under which a person constructing a generating station may apply to PSC for an exemption from the CPCN requirement:

- the facility is designed to provide onsite generated electricity, the capacity is up to 70 megawatts, and the excess electricity can be sold only on the wholesale market pursuant to a specified agreement with the local electric company;
- at least 10% of the electricity generated is consumed onsite, the capacity is up to 25 megawatts, and the excess electricity is sold on the wholesale market pursuant to a specified agreement with the local electric company; or
- the facility is wind-powered and land-based, the capacity is up to 70 megawatts, and the facility is no closer than a PSC-determined distance from the Patuxent River Naval Air Station, among other requirements.

However, PSC must require a person who is exempted from the CPCN requirement to obtain approval from the commission before the person may construct a generating station as described above. The application must contain specified information that PSC requires, including proof of compliance with all applicable requirements of the independent system operator.

Exemptions Under § 7-207.4 of the Public Utilities Article

The Renewable Energy Certainty Act of 2025 (Chapters 623 and 624) establishes the Distributed Generation Certificate of Public Convenience and Necessity (DGCPCN), a certificate that PSC may issue – in lieu of a CPCN – to a person seeking to construct and operate community solar projects that have a generating capacity of 2 megawatts to 5 megawatts and meet other specified requirements. A DGCPCN carries the same force and effect as a CPCN while offering applicants a streamlined review process; however, until PSC begins accepting applications for DGCPCNs (likely in 2027), a CPCN will still be required to construct a community solar project.

As with the CPCN process, PSC must provide an opportunity for public comment and hold a public hearing on a DGCPCN application in each county where any portion of the project is proposed to be located.

Additional Information

For a more thorough discussion of the above topics, along with legislative history and recent data trends, see [*The Maryland Certificate of Public Convenience and Necessity*](#) on the Department of Legislative Services' website.