Public Utilities - Electric School Bus Pilot Program

This bill establishes the Electric School Bus Pilot Program, implemented and administered by the Public Service Commission (PSC). An investor-owned electric company (“utility”) may apply to PSC to implement a pilot program, as specified. Subject to PSC approval and specified conditions, a utility may (1) recover all reasonable and prudent program costs incurred under the program through a mechanism that is reviewed and approved by PSC and (2) establish a pilot tariff or rate to provide service to an electric school bus. Beginning in 2025, a utility that establishes a pilot program must annually report on the program, in consultation with each participating school system, as specified. The bill takes effect June 1, 2022.

Fiscal Summary

State Effect: No effect in FY 2022. Special fund expenditures for PSC increase by $200,000 in FY 2023. Special fund revenues increase correspondingly from assessments imposed on public service companies. The effect on electricity prices is unknown.

<table>
<thead>
<tr>
<th>(in dollars)</th>
<th>FY 2022</th>
<th>FY 2023</th>
<th>FY 2024</th>
<th>FY 2025</th>
<th>FY 2026</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF Revenue</td>
<td>$0</td>
<td>$200,000</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>SF Expenditure</td>
<td>$0</td>
<td>$200,000</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
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<tr>
<td>Net Effect</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
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Note: (−) = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (−) = indeterminate decrease

Local Effect: Local government revenues (from utility rebates) and expenditures (for electric buses and related costs) increase to the extent that local school systems opt to participate in the pilot program, beginning in FY 2023, and further discussed below. The overall effect on a particular local government is unknown.

Small Business Effect: Minimal.
Analysis

Bill Summary:

Pilot Program Requirements

Generally, under the electric school bus pilot program, a utility installs interconnection equipment and provides rebates to local school systems to cover incremental costs of an electric bus fleet, and the school system allows the utility to access the stored electricity without additional compensation at times when the school system determines that the buses are not needed to transport students. A utility may apply to PSC to implement an electric school bus pilot program if the program is structured to begin by October 1, 2024, and:

- provide for the deployment of at least 25 electric school buses;
- provide for electric school bus rebates to participating school systems;
- limit total rebates to $50.0 million;
- allow the utility to use the storage batteries of the electric school buses to access the stored electricity through vehicle-to-grid technology, generally without additional compensation to the school system for the electricity and at times when the participating school system determines that the school buses are not needed to transport students (a utility that uses electricity that a participating school system provides to charge an electric school bus battery must replace that electricity at no cost);
- provide for the selection of school systems that apply to participate in the pilot program on the basis of appropriate factors determined by the utility with the approval of PSC, including the locational benefits that the storage batteries of school buses are expected to bring to the utility;
- consider, in determining the appropriate factors used for the selection of school systems, the health and economic effects on low-income and minority communities;
- provide and install the interconnection equipment and interconnection facilities for electric vehicle charging stations;
- ensure each electric school bus is equipped with lap and shoulder belts in accordance with recommendations from the National Transportation Safety Board; and
- ensure the school board is provided with adequate training and expertise to be able to operate electric school buses and related equipment.

Generally, the initial duration of an electric school bus pilot program must be at least three years and may be up to five years; however, on the request of a utility, PSC may authorize an expansion of the scope, deployment, program costs, and duration of the pilot program.
Requirements for Participating School Systems

A participating school system must (1) when deploying electric school buses, consider criteria that benefit students who are eligible for free and reduced-price meals and (2) prior to the delivery of electric school buses, develop a plan for training and retaining any school system employee affected by the pilot program.

Federal Funding and Renewable Resources

With respect to the electric school bus pilot program established by the bill, the General Assembly encourages electric school bus pilot program applicants to seek any federal funds that may be available, including funds available under the federal Infrastructure and Investment Jobs Act. Where feasible, the General Assembly also encourages applicants to produce or procure electricity generated by renewable resources to power electric school bus charging infrastructure.

Current Law: An electric school bus pilot program funded through electric utilities does not exist. Unless it fails to meet applicable school bus and motor vehicle safety standards, a school vehicle may be operated for 12 to 15 years, depending on the county and other requirements.

Chapter 492 of 2019 established the Zero-Emission Vehicle School Bus Transition Grant Program within the Maryland Department of the Environment to provide grants to local boards of education (and entities that contract with local boards to provide transportation services) to (1) purchase school buses that are zero-emission vehicles; (2) install electric vehicle infrastructure for charging school buses that are zero-emission vehicles; (3) engage in planning for a transition to using school buses that are zero-emission vehicles; and (4) fund pilot programs to experiment with a transition to school buses that are zero-emission vehicles.

State Fiscal Effect: PSC advises that the bill requires additional program analysis as well as additional staff time and resources to consider appropriate cost allocation and recovery for the affected investor-owned utilities. The COVID-19 pandemic and hiring freeze has negatively impacted the agency’s resources, making it necessary to use consulting assistance for these tasks. Therefore, special fund expenditures for PSC increase by $200,000 for consultant services; even though the bill takes effect in fiscal 2022, this estimate assumes that costs are incurred in fiscal 2023. Special fund revenues increase correspondingly from assessments imposed on public service companies.

The effect on electricity prices is unknown. Broadly, the bill contemplates the utilities receiving compensation in the electricity markets for the energy and/or capacity value of the school bus batteries – batteries that the school systems must generally allow the utilities
to use without additional compensation. The effect on electricity prices will depend on the amount of revenue available to utilities from using the school bus batteries as authorized, versus the costs of the infrastructure investments and rebates, and the timing of the associated cost recovery through increased utility rates.

Local Fiscal Effect: Local government revenues (from utility rebates) and expenditures (for electric buses and related costs) increase to the extent that local school systems opt to participate in the pilot program beginning in fiscal 2023. (While the bill takes effect in fiscal 2022, pilot program implementation is most likely to begin in fiscal 2023.) The overall effect on a particular local government is unknown, but the bill contemplates a program that would have no net effect on a particular local government’s finances due to the purchase and deployment of electric school buses, if estimated incremental costs align with subsequent utility rebates. Still, there is the possibility that some costs or savings will not be included in utility rebates – whether they be unforeseen, tangential, or extend beyond the duration of the three- to five-year pilot program.

For example, electric buses are believed to have lower operating and maintenance costs over time – the duration of those potential savings, and whether/how they will be accounted for in the overall calculation of incremental costs eligible for rebates, is not specified in the bill. It is conceivable that a school system could continue benefiting from its electric buses after the pilot program terminates and rebates cease.

The Maryland State Department of Education has previously advised for a prior-year bill that the cost of a traditional diesel-powered school bus can start at about $90,000, while a comparable electric-powered school bus can cost more than $340,000. There are also additional capital costs related to electric school buses (e.g., electric charging stations and related infrastructure investments).

Additional Comments: In February 2021, Montgomery County entered into a contract to begin the conversion of its diesel school bus fleet to electric. Under that agreement, which provides for more buses over time, the contractor owns all equipment and is responsible for all significant maintenance costs, and the county makes payments to the contractor for their use. Montgomery County plans to convert all of its 1,400 buses to electric by 2035.

Additional Information

Prior Introductions: HB 832 of 2021 passed the House, as amended, and received a hearing in the Senate Finance Committee, but no further action was taken.

Designated Cross File: SB 948 (Senator Kramer) - Finance.