

Department of Legislative Services
Maryland General Assembly
2019 Session

FISCAL AND POLICY NOTE
First Reader

Senate Bill 573
Finance

(Senator Feldman)

Energy Storage Pilot Project Act

This bill requires the Public Service Commission (PSC) to establish an Energy Storage Pilot Program by February 28, 2020. Various program implementation and evaluation steps must be met within specified timeframes. PSC must evaluate the program and report its findings to the General Assembly by December 31, 2023. The pilot program may not preclude any other investment by a public service company in energy storage.

Fiscal Summary

State Effect: PSC can establish and administer the pilot program with existing budgeted resources. The bill does not otherwise materially affect State finances or operations.

Local Effect: The bill does not materially affect local government finances or operations.

Small Business Effect: Minimal.

Analysis

Bill Summary:

Program Progression

By February 28, 2020: PSC must establish the program.

By February 28, 2021: Each investor-owned electric company (there are four) must solicit proposals and apply for PSC approval. PSC must determine which projects to approve. Each investor-owned electric company must negotiate contracts to implement projects.

By February 28, 2022: All projects must become operational, unless an extension is granted by PSC for good cause.

By February 28, 2023: Unless granted an extension from PSC, each investor-owned electric company must submit specified information or data to PSC concerning the projects, such as their costs, operational challenges, technology type, location, *etc.*

By December 31, 2023: PSC must evaluate the projects based on specified factors and report its findings to the General Assembly.

Utility Ownership Model

PSC must require each investor-owned electric company to solicit offers to develop energy storage projects for each of the following four commercial and regulatory models:

- a “utility-only” model under which the electric company would own the project, control the project for grid reliability, and operate the project in wholesale markets or other applications when not providing grid services;
- a “utility and third-party” model under which the electric company would own the project and control the project for grid reliability, and a third party would operate the project in wholesale markets or other applications when the project is not providing grid services;
- a “third-party ownership” model under which the electric company would contract with a project owned by a third party for grid reliability; and
- a “virtual power plant” model under which (1) the electric company would aggregate or use a third-party aggregator to receive grid services from distributed energy storage projects owned by customers or a third party and (2) the projects would be used by the customers or third party for other applications when the projects are not providing grid services.

Application Process

By February 28, 2021, each investor-owned electric company must submit an application for PSC approval to deploy energy storage projects from at least two of the models described above, subject to specified requirements. PSC must determine which projects to approve. Applications must include specified information, such as (1) best estimates of costs and savings for each project; (2) project location and size; (3) the type of energy storage technology; and (4) the process the investor-owned electric company used to solicit offers for the project, including feedback on models not selected and an explanation for why the chosen model was selected.

Cost Recovery, Ownership, and Operation of Energy Storage Device

For purposes of the pilot program only, PSC may allow, on a project-by-project basis:

- an investor-owned electric company to own or operate an energy storage device;
- an energy storage device owned or operated by an investor-owned electric company to participate in all available wholesale electricity revenue markets in order to realize benefits for the company's customers;
- full and timely cost recovery by the investor-owned electric company, at the rate of return authorized by PSC in the most recent base rate proceeding for the company, taking into account any use of an asset that may not be included in base rates;
- an investor-owned electric company to coordinate the use of an energy storage device;
- an investor-owned electric company to use fully until the end of the device's useful life, an energy storage device owned or operated by the company; and
- an investor-owned electric company to offer rebates or other incentives for energy storage devices behind or in front of the meter that can be configured to provide temporary backup power to a customer.

Data Submission to PSC

By February 28, 2023, an investor-owned electric company must submit specified technical and financial information and data to PSC related to the approved projects, including:

- estimated and final project costs, with various subcategories;
- the size of the energy storage project in watts and the duration of the energy storage project in watt-hours;
- any project financing methods and other related information, such as the rate of return and the cost recovery mechanism for the project;
- the business model selected for the project;
- enhanced grid reliability as a result of the project, and any other identified benefits;
- any project delays and the causes for the delays; and
- any emissions reductions expected as a result of the project.

An investor-owned electric company must make all of the required data that is not proprietary or confidential available to the public.

PSC Evaluation

By December 31, 2023, PSC must evaluate the projects approved under the pilot program based on specified factors, including (1) the overall cost of the project; (2) benefits provided as a result of the project; (3) issues that the project encountered in implementation; and (4) whether the project altered the quality or availability of electricity supply.

Current Law/Background: Chapter 382 of 2017 required the Power Plant Research Program in the Department of Natural Resources to conduct a study of regulatory reforms and market incentives that are necessary or beneficial to increase the use of energy storage devices in the State. The [final report](#) was required to be submitted to the General Assembly by December 1, 2018.

Energy storage is a technology that can provide a variety of benefits that do not neatly fit within Maryland's deregulated electricity markets and its categories of distribution, transmission, and generation. Through its Public Conference 44 on Grid Modernization, PSC has been considering pilot projects and revisions to State regulations that to help to address energy storage interconnection challenges, and various ownership and cost recovery models under Maryland's deregulated energy framework. The pilot program under the bill is similar to a program recently submitted to PSC for consideration under Public Conference 44.

Additional Information

Prior Introductions: None.

Cross File: HB 650 (Delegates Korman and Barve) - Economic Matters.

Information Source(s): Public Service Commission; Office of People's Counsel; Department of Natural Resources; Department of Legislative Services

Fiscal Note History: First Reader - February 19, 2019
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