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BILL NO.: House Bill 787
Electricity – Energy Storage Systems (STEP Act)

COMMITTEE: Economic Matters

HEARING DATE: February 25, 2016

SPONSORS: Delegate Korman

POSITION: Informational

House Bill 787 requires the Public Service Commission to open a proceeding to determine appropriate targets, *if any*, for each electric company, to procure *technologically viable and cost-effective* energy storage systems by December 31, 2020 and December 31, 2025. The Commission must consider data and results from testing and trial pilot projects and PJM information, as well as the integration of technologies with other programs, including demand-side management programs, to achieve the most efficient use of generation resources and cost-effective, energy-efficient grid integration and management. The Bill also states the energy storage systems may be used to assist in achieving service quality and reliability standards set forth in PUA § 7-213. The deadline for the Commission's decision to adopt the procurement targets is October 1, 2018. If targets are adopted, each electric company would then be required to submit procurement plans for energy storage systems to achieve several purposes that fall into these categories:

- Integration of intermittent generation from eligible renewable energy resources into the reliable operation of the grid
- Reduction of purchases of electric generation sources with higher emissions of greenhouse gases

- Avoidance or delay of investments in transmission and distribution system upgrades.

Key considerations for the Commission are the technological viability and cost-effectiveness of such energy storage systems in deciding whether to establish targets for the electric companies.

Energy storage has been a major topic of discussion for a number of years, and often referred to as a “game changer.” We have seen an increase in the number of distributed energy storage (DES) projects nationally in the past few years. DES can be located at a distribution substation, within a distribution system or customer-sited (on either side of the meter). Utility scale energy storage is of larger scale and interconnects with, and supports, the bulk electric power system. DES may produce several benefits by improving reliability and resiliency of the distribution system and providing flexibility to the grid, and has the possibility of reducing costs by deferring the need for upgrades to the distribution system. However, at this time, there still are many challenges to the adoption of energy storage initiatives. These include technological and economic challenges.

Energy storage ultimately may provide positive contributions to the operation of the distribution system, by increasing the efficiency and reliability of the system. However, a singular focus on energy storage, with a mandate to adopt procurement targets “if technologically viable and cost-effective,” may be too narrow an approach for system planning. At the present time, we do not have in Maryland an overall process for consideration of alternative approaches to maintaining the most reliable, flexible cost-effective distribution system. Energy storage may be the preferred alternative for some of the goals set forth in House Bill 705, but not necessarily for all. A broader planning initiative, which would include consideration of energy storage, under the oversight of the Commission, could be helpful for future planning.