

HOUSE BILL 787

C5

6lr1850

By: **Delegates Korman, Barkley, Carr, Cassilly, Fraser–Hidalgo, Frick, Frush, Hixson, Krimm, Lam, Lierman, Luedtke, Miele, A. Miller, Morhaim, Reznik, and Waldstreicher**

Introduced and read first time: February 8, 2016

Assigned to: Economic Matters

A BILL ENTITLED

1 AN ACT concerning

2 **Electricity – Energy Storage Systems**
3 **(Storage Technology and Electric Power (STEP) Act)**

4 FOR the purpose of requiring the Public Service Commission to open a proceeding to
5 determine certain appropriate targets and policies for certain electric companies to
6 procure certain energy storage systems by certain dates; providing for the
7 consideration of certain matters in the proceeding; requiring the Commission to
8 adopt certain targets by a certain date; requiring the Commission to reevaluate
9 certain determinations in a certain manner; providing for the scope and application
10 of this Act; requiring the Commission to consider certain matters in adopting and
11 reevaluating certain targets and policies; providing that certain energy storage
12 systems may be used to assist in achieving certain requirements; requiring certain
13 electric companies to adopt certain plans for procurement of certain energy storage
14 systems, addressing certain matters; requiring certain procurement to be
15 cost-effective; requiring certain electric companies to submit certain reports to the
16 Commission by certain dates; requiring the Commission to make the reports
17 available in a certain manner; authorizing the Commission to adopt certain
18 regulations for certain purposes; defining certain terms; and generally relating to
19 the energy storage systems.

20 BY repealing and reenacting, without amendments,
21 Article – Public Utilities
22 Section 1–101(a), (h), and (i)
23 Annotated Code of Maryland
24 (2010 Replacement Volume and 2015 Supplement)

25 BY adding to
26 Article – Public Utilities

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



1 Section 7–801 through 7–808 to be under the new subtitle “Subtitle 8. Energy
2 Storage Systems”
3 Annotated Code of Maryland
4 (2010 Replacement Volume and 2015 Supplement)

5 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,
6 That the Laws of Maryland read as follows:

7 **Article – Public Utilities**

8 1–101.

9 (a) In this division the following words have the meanings indicated.

10 (h) (1) “Electric company” means a person who physically transmits or
11 distributes electricity in the State to a retail electric customer.

12 (2) “Electric company” does not include:

13 (i) the following persons who supply electricity and electricity
14 supply services solely to occupants of a building for use by the occupants:

15 1. an owner/operator who holds ownership in and manages
16 the internal distribution system serving the building; or

17 2. a lessee/operator who holds a leasehold interest in and
18 manages the internal distribution system serving the building;

19 (ii) any person who generates on–site generated electricity; or

20 (iii) a person who transmits or distributes electricity within a site
21 owned by the person or the person’s affiliate that is incidental to a primarily
22 landlord–tenant relationship.

23 (i) “Electric plant” means the material, equipment, and property owned by an
24 electric company and used or to be used for or in connection with electric service.

25 **SUBTITLE 8. ENERGY STORAGE SYSTEMS.**

26 **7–801.**

27 **(A) IN THIS SUBTITLE THE FOLLOWING WORDS HAVE THE MEANINGS**
28 **INDICATED.**

29 **(B) (1) “ENERGY STORAGE DEVICE” MEANS A DEVICE USED TO STORE**
30 **ENERGY FOR USE AS ELECTRICITY AT A LATER TIME, OR FOR USE IN A PROCESS THAT**

1 OFFSETS ELECTRICITY USE AT A PEAK TIME.

2 (2) "ENERGY STORAGE DEVICE" INCLUDES:

3 (I) COMPRESSED AIR;

4 (II) A BATTERY OR ANY OTHER ELECTROCHEMICAL FORM OF
5 STORAGE;

6 (III) HYDROGEN FOR A FUEL CELL;

7 (IV) A THERMAL FORM OF STORAGE, SUCH AS HOT WATER OR
8 ICE;

9 (V) A FLYWHEEL;

10 (VI) A CAPACITOR; AND

11 (VII) A SUPERCONDUCTING MAGNET.

12 (3) "ENERGY STORAGE DEVICE" DOES NOT INCLUDE PUMPED
13 HYDROPOWER.

14 (C) "ENERGY STORAGE SYSTEM" MEANS EQUIPMENT FOR ENERGY
15 STORAGE THAT INCORPORATES ONE OR MORE ENERGY STORAGE DEVICES.

16 7-802.

17 THIS SUBTITLE DOES NOT APPLY TO:

18 (1) A MUNICIPAL CORPORATION; OR

19 (2) A RURAL ELECTRIC COOPERATIVE.

20 7-803.

21 (A) (1) ON OR BEFORE MARCH 1, 2017, THE COMMISSION SHALL OPEN A
22 PROCEEDING TO DETERMINE APPROPRIATE INCREASING TARGETS, IF ANY, FOR
23 EACH ELECTRIC COMPANY TO PROCURE VIABLE AND COST-EFFECTIVE ENERGY
24 STORAGE SYSTEMS TO BE ACHIEVED BY DECEMBER 31, 2020, AND DECEMBER 31,
25 2025.

26 (2) AS PART OF THIS PROCEEDING, THE COMMISSION MAY CONSIDER

1 A VARIETY OF POSSIBLE POLICIES TO ENCOURAGE THE COST-EFFECTIVE
2 DEPLOYMENT OF ENERGY STORAGE SYSTEMS, INCLUDING REFINEMENT OF
3 EXISTING PROCUREMENT METHODS TO ASSIGN PROPER VALUES TO ENERGY
4 STORAGE SYSTEMS.

5 (B) ON OR BEFORE OCTOBER 1, 2018, THE COMMISSION SHALL ADOPT THE
6 PROCUREMENT TARGETS THAT THE COMMISSION DETERMINES TO BE
7 APPROPRIATE, IF ANY, UNDER SUBSECTION (A) OF THIS SECTION.

8 (C) THE COMMISSION SHALL REEVALUATE THE DETERMINATIONS MADE
9 UNDER THIS SECTION NOT LESS THAN ONCE EVERY 3 YEARS.

10 (D) IN EVALUATING THE NEED FOR ENERGY STORAGE SYSTEMS THAT
11 ELECTRIC COMPANIES SHALL PROCURE UNDER THIS SUBTITLE, THE COMMISSION
12 MAY EXCLUDE FROM CONSIDERATION ANY LOAD THAT IS NOT SUBJECT TO THE
13 RENEWABLE ENERGY PORTFOLIO STANDARD UNDER § 7-703(A)(2) OF THIS TITLE.

14 (E) NOTHING IN THIS SECTION PROHIBITS THE COMMISSION'S
15 EVALUATION AND APPROVAL OF ANY APPLICATION FOR FUNDING OR RECOVERY OF
16 COSTS OF ANY ONGOING OR NEW DEVELOPMENT, TRIALING, AND TESTING OF
17 ENERGY STORAGE PROJECTS OR TECHNOLOGIES OUTSIDE OF ANY PROCEEDING
18 REQUIRED BY THIS SUBTITLE.

19 **7-804.**

20 IN ADOPTING AND REEVALUATING APPROPRIATE ENERGY STORAGE SYSTEM
21 PROCUREMENT TARGETS AND POLICIES UNDER § 7-803 OF THIS SUBTITLE, THE
22 COMMISSION SHALL:

23 (1) CONSIDER EXISTING OPERATIONAL DATA AND RESULTS OF
24 TESTING AND TRIAL PILOT PROJECTS FROM EXISTING ENERGY STORAGE
25 FACILITIES;

26 (2) CONSIDER AVAILABLE INFORMATION FROM PJM
27 INTERCONNECTION, LLC, DERIVED FROM PJM'S TESTING AND EVALUATION
28 PROCEDURES;

29 (3) CONSIDER THE INTEGRATION OF ENERGY STORAGE
30 TECHNOLOGIES WITH OTHER PROGRAMS, INCLUDING DEMAND-SIDE MANAGEMENT
31 OR OTHER MEANS OF ACHIEVING THE PURPOSES IDENTIFIED IN THE "TEN-YEAR
32 PLAN OF MARYLAND ELECTRIC UTILITIES" PREPARED BY THE COMMISSION AND
33 THE REGIONAL TRANSMISSION EXPANSION PLAN PROCESS OF PJM, THAT WILL
34 RESULT IN THE MOST EFFICIENT USE OF GENERATION RESOURCES AND

1 COST-EFFECTIVE, ENERGY-EFFICIENT GRID INTEGRATION AND MANAGEMENT; AND

2 (4) ENSURE THAT THE ENERGY STORAGE SYSTEM PROCUREMENT
3 TARGETS AND POLICIES THAT ARE ESTABLISHED ARE TECHNOLOGICALLY VIABLE
4 AND COST-EFFECTIVE.

5 7-805.

6 AN ENERGY STORAGE SYSTEM MAY BE USED TO ASSIST IN ACHIEVING THE
7 SERVICE QUALITY AND RELIABILITY REQUIREMENTS ESTABLISHED FOR AN
8 ELECTRIC COMPANY UNDER § 7-213 OF THIS TITLE IF IT MEETS APPLICABLE
9 STANDARDS.

10 7-806.

11 (A) EACH ELECTRIC COMPANY SHALL ADOPT A PLAN FOR THE
12 PROCUREMENT OF ANY ENERGY STORAGE SYSTEMS REQUIRED UNDER § 7-803 OF
13 THIS SUBTITLE.

14 (B) THE PLAN SHALL ADDRESS THE ACQUISITION AND USE OF ENERGY
15 STORAGE SYSTEMS IN ORDER TO ACHIEVE THE FOLLOWING PURPOSES:

16 (1) INTEGRATING INTERMITTENT GENERATION FROM ELIGIBLE
17 RENEWABLE ENERGY RESOURCES INTO THE RELIABLE OPERATION OF THE
18 TRANSMISSION AND DISTRIBUTION GRID;

19 (2) ALLOWING INTERMITTENT GENERATION FROM ELIGIBLE
20 RENEWABLE ENERGY RESOURCES TO OPERATE AT OR NEAR FULL CAPACITY;

21 (3) REDUCING THE NEED FOR NEW FOSSIL-FUEL POWERED PEAKING
22 GENERATION FACILITIES BY USING STORED ELECTRICITY TO MEET PEAK DEMAND;

23 (4) REDUCING PURCHASES OF ELECTRICITY GENERATION SOURCES
24 WITH HIGHER EMISSIONS OF GREENHOUSE GASES;

25 (5) ELIMINATING OR REDUCING TRANSMISSION AND DISTRIBUTION
26 LOSSES, INCLUDING INCREASED LOSSES DURING PERIODS OF CONGESTION ON THE
27 GRID;

28 (6) REDUCING THE DEMAND FOR ELECTRICITY DURING PEAK
29 PERIODS AND ACHIEVING PERMANENT LOAD-SHIFTING BY USING THERMAL
30 STORAGE TO MEET AIR-CONDITIONING NEEDS;

1 **(7) AVOIDING OR DELAYING INVESTMENTS IN TRANSMISSION AND**
2 **DISTRIBUTION SYSTEM UPGRADES; AND**

3 **(8) USING ENERGY STORAGE SYSTEMS TO PROVIDE THE ANCILLARY**
4 **SERVICES OTHERWISE PROVIDED BY FOSSIL-FUELED GENERATING FACILITIES.**

5 **(C) ALL PROCUREMENT OF ENERGY STORAGE SYSTEMS BY AN ELECTRIC**
6 **COMPANY UNDER THIS SUBTITLE SHALL BE COST-EFFECTIVE.**

7 **7-807.**

8 **(A) (1) ON OR BEFORE JANUARY 1, 2021, EACH ELECTRIC COMPANY**
9 **SHALL SUBMIT A REPORT TO THE COMMISSION DEMONSTRATING THAT IT HAS**
10 **COMPLIED WITH THE ENERGY STORAGE SYSTEM PROCUREMENT TARGETS AND**
11 **POLICIES THE COMMISSION DETERMINES FOR THE ELECTRIC COMPANY TO**
12 **ACHIEVE BY DECEMBER 31, 2020, UNDER § 7-803 OF THIS SUBTITLE.**

13 **(2) ON OR BEFORE JANUARY 1, 2026, EACH ELECTRIC COMPANY**
14 **SHALL SUBMIT A REPORT TO THE COMMISSION DEMONSTRATING THAT IT HAS**
15 **COMPLIED WITH THE ENERGY STORAGE SYSTEM PROCUREMENT TARGETS AND**
16 **POLICIES THE COMMISSION DETERMINES FOR THE ELECTRIC COMPANY TO**
17 **ACHIEVE BY DECEMBER 31, 2025, UNDER § 7-803 OF THIS SUBTITLE.**

18 **(B) THE COMMISSION SHALL ENSURE THAT A COPY OF EACH REPORT**
19 **REQUIRED BY SUBSECTION (A) OF THIS SECTION, WITH ANY CONFIDENTIAL**
20 **INFORMATION REDACTED, IS AVAILABLE ON THE COMMISSION'S WEB SITE.**

21 **7-808.**

22 **THE COMMISSION MAY ADOPT REGULATIONS TO CARRY OUT THIS SUBTITLE.**

23 **SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect**
24 **October 1, 2016.**