C5 6lr0741

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Introduced and read first time: February 8, 2016

Assigned to: Economic Matters

A BILL ENTITLED

1 AN ACT concerning

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Energy Storage Portfolio Standard
(Storage Technology and Electric Power (STEP) Act)

FOR the purpose of establishing a certain energy storage portfolio standard in the State; requiring certain electricity suppliers to comply with the energy storage portfolio standard by certain dates; requiring certain storage capacity to be sufficient to provide electricity at a certain capacity for a certain period; providing that certain energy storage devices may be used to comply with the energy storage portfolio standard, with certain exceptions; providing for the creation and use of certain energy storage credits; requiring certain electricity suppliers to demonstrate compliance with the energy storage portfolio standard to the Public Service Commission by certain dates; requiring certain electricity suppliers to submit annual reports to the Commission concerning compliance with the energy storage portfolio standard; establishing a certain compliance fee that must be paid into the Maryland Strategic Energy Investment Fund under certain circumstances in certain years, subject to a certain adjustment; authorizing certain aggregators and brokers to require certain other electricity suppliers to demonstrate compliance with this Act; authorizing the Commission to provide certain waivers under certain circumstances; authorizing an electricity supplier to use certain accumulated energy storage credits for certain purposes, including demonstrating compliance with the energy storage portfolio standard; providing for reliance on certain credits under certain circumstances; requiring the Commission to adopt by regulation certain requirements for documentation and verification of certain credits; requiring the Commission to adopt certain regulations for certain purposes; providing for the use of certain compliance fees paid into the Maryland Strategic Energy Investment Fund; defining certain terms; providing for the application of this Act; and generally relating to the energy storage portfolio standard.

BY adding to

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(E)

1 2 3 4 5	Article – Public Utilities Section 7–801 through 7–808 to be under the new subtitle "Subtitle 8. Energy Storage Portfolio Standard" Annotated Code of Maryland (2010 Replacement Volume and 2015 Supplement)
6 7 8 9	BY repealing and reenacting, with amendments, Article – State Government Section 9–20B–05(i) Annotated Code of Maryland (2014 Replacement Volume and 2015 Supplement)
11	SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:
13	Article - Public Utilities
4	SUBTITLE 8. ENERGY STORAGE PORTFOLIO STANDARD.
5	7–801.
6	(A) IN THIS SUBTITLE THE FOLLOWING WORDS HAVE THE MEANINGS INDICATED.
18	(B) "CUSTOMER" HAS THE MEANING STATED IN § 7–501 OF THIS TITLE.
9	(C) "ELECTRICITY SUPPLIER" HAS THE MEANING STATED IN § 1–101 OF THIS ARTICLE.
21 22 23	(D) "ENERGY STORAGE CREDIT" OR "CREDIT" MEANS A CREDIT EQUAL TO THE ENERGY CAPACITY RATING OF 1 KILOWATT-HOUR OF ELECTRICITY OR ITS EQUIVALENT STORED ON AN ENERGY STORAGE DEVICE THAT IS:
24 25	(1) AVAILABLE TO PROVIDE ELECTRICITY FOR A CONTINUOUS PERIOD OF AT LEAST 1 HOUR; AND
26	(2) IS LOCATED:
27	(I) IN THE PJM REGION; OR
28 29 30	(II) OUTSIDE THE AREA DESCRIBED IN ITEM (I) OF THIS ITEM BUT IN A CONTROL AREA THAT IS ADJACENT TO THE PJM REGION IF THE ELECTRICITY IS DELIVERED INTO THE PJM REGION.

(1) "ENERGY STORAGE DEVICE" MEANS A DEVICE USED TO STORE

- 1 ENERGY FOR USE AS ELECTRICITY AT A LATER TIME, OR FOR USE IN A PROCESS THAT OFFSETS ELECTRICITY USE AT A PEAK TIME. 2 "ENERGY STORAGE DEVICE" INCLUDES: 3 **(2)** (I)**COMPRESSED AIR;** 4 5 (II)A BATTERY OR OTHER ELECTROCHEMICAL FORM OF 6 STORAGE; 7 (III) HYDROGEN FOR A FUEL CELL; 8 (IV) A THERMAL FORM OF STORAGE, SUCH AS HOT WATER OR 9 ICE; 10 (V) A FLYWHEEL; 11 (VI) A CAPACITOR; AND 12 (VII) A SUPERCONDUCTING MAGNET. "ENERGY STORAGE DEVICE" DOES NOT INCLUDE PUMPED 13 **(3)** 14 HYDROPOWER. "PJM REGION" HAS THE MEANING STATED IN § 7-701 OF THIS TITLE. 15 **(F)**
- 16 7-802.
- 17 THIS SUBTITLE APPLIES TO EACH ELECTRICITY SUPPLIER THAT SELLS 18 ELECTRICITY TO RETAIL ELECTRIC CUSTOMERS IN THE STATE.
- 7-803. 19
- 20 (1) EXCEPT AS PROVIDED IN § 7–806(E) OF THIS SUBTITLE, EACH ELECTRICITY SUPPLIER THAT SELLS ELECTRICITY IN THE STATE SHALL COMPLY 2122 WITH THE ENERGY STORAGE PORTFOLIO STANDARD UNDER THIS SECTION.
- THE ENERGY STORAGE PORTFOLIO STANDARD MAY NOT APPLY 23**(2)**
- TO ELECTRICITY SALES AT RETAIL BY ANY ELECTRICITY SUPPLIER IN EXCESS OF 24
- 300,000 KILOWATT-HOURS OF INDUSTRIAL PROCESS LOAD TO A SINGLE CUSTOMER 25
- 26IN A YEAR.
- (1) NO LATER THAN JANUARY 1, 2021, EACH ELECTRICITY SUPPLIER 27(B)

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A THIRD PARTY; OR

A CUSTOMER.

1 SHALL HAVE AVAILABLE ON THE SYSTEM OF THE ELECTRICITY SUPPLIER ENERGY 2 STORAGE DEVICES WITH AN ENERGY CAPACITY RATING EQUAL TO NOT LESS THAN 3 1% OF THE ANNUAL AVERAGE PEAK POWER DEMAND THAT THE ELECTRICITY SUPPLIER SERVES, AS: 4 5 (I)MEASURED OVER A 1-HOUR PERIOD; AND 6 (II)AVERAGED OVER CALENDAR YEARS 2017 THROUGH 2019. 7 NO LATER THAN JANUARY 1, 2025, EACH ELECTRICITY SUPPLIER SHALL HAVE AVAILABLE ON THE SYSTEM OF THE ELECTRICITY SUPPLIER ENERGY 8 STORAGE DEVICES WITH A POWER CAPACITY RATING EQUAL TO NOT LESS THAN 2% 9 OF THE ANNUAL AVERAGE PEAK POWER DEMAND ON THE SYSTEM, AS: 10 11 **(I)** MEASURED OVER A 1-HOUR PERIOD; AND 12 (II)AVERAGED OVER CALENDAR YEARS 2021 THROUGH 2023. 13 AN ELECTRICITY SUPPLIER SHALL MEET THE APPLICABLE ENERGY 14 STORAGE PORTFOLIO STANDARD BY ACCUMULATING THE EQUIVALENT AMOUNT OF 15 ENERGY STORAGE CREDITS THAT EQUAL THE PERCENTAGES REQUIRED UNDER 16 THIS SECTION. 17 TO CREATE AN ENERGY STORAGE CREDIT, AN ENERGY STORAGE DEVICE MUST SUBSTANTIALLY COMPLY WITH ALL APPLICABLE ENVIRONMENTAL AND 18 ADMINISTRATIVE REQUIREMENTS, INCLUDING AIR QUALITY, WATER QUALITY, 19 20 SOLID WASTE, AND RIGHT-TO-KNOW PROVISIONS, PERMIT CONDITIONS, AND 21ADMINISTRATIVE ORDERS. 22 7-804. 23 AN ENERGY STORAGE DEVICE THAT IS CONNECTED TO A CUSTOMER 24LOCATION OR TO AN ELECTRIC TRANSMISSION SYSTEM OR DISTRIBUTION SYSTEM 25 MAY BE USED TO COMPLY WITH THE ENERGY STORAGE PORTFOLIO STANDARD UNDER § 7–803 OF THIS SUBTITLE. 26 27(B) AN ENERGY STORAGE DEVICE MAY BE OWNED BY: 28**(1)** AN ELECTRICITY SUPPLIER;

- 1 **7–805.**
- 2 AN ENERGY STORAGE DEVICE PLACED IN OPERATION BEFORE JANUARY 1,
- 3 2017, MAY NOT BE USED TO ACHIEVE COMPLIANCE WITH THE ENERGY STORAGE
- 4 PORTFOLIO STANDARD UNDER § 7–803 OF THIS SUBTITLE.
- 5 **7–806.**
- 6 (A) SUBJECT TO SUBSECTION (E) OF THIS SECTION, EACH ELECTRICITY
 7 SUPPLIER SHALL SUBMIT A REPORT TO THE COMMISSION EACH YEAR IN A FORM
- 8 AND BY A DATE SPECIFIED BY THE COMMISSION THAT:
- 9 (1) DEMONSTRATES THAT THE ELECTRICITY SUPPLIER HAS 10 COMPLIED WITH THE ENERGY STORAGE PORTFOLIO STANDARD UNDER § 7–803 OF
- 11 THIS SUBTITLE BY THE APPLICABLE DATES SPECIFIED IN THAT SECTION; OR
- 12 (2) DEMONSTRATES THE AMOUNT OF POWER CAPACITY BY WHICH
- 13 THE ELECTRICITY SUPPLIER FAILED TO MEET THE APPLICABLE ENERGY STORAGE
- 14 PORTFOLIO STANDARD UNDER § 7–803 OF THIS SUBTITLE.
- 15 (B) (1) IF AN ELECTRICITY SUPPLIER FAILS TO COMPLY WITH THE
- 16 ENERGY STORAGE PORTFOLIO STANDARD FOR THE APPLICABLE YEAR, THE
- 17 ELECTRICITY SUPPLIER SHALL PAY INTO THE MARYLAND STRATEGIC ENERGY
- 18 INVESTMENT FUND ESTABLISHED UNDER § 9–20B–05 OF THE STATE GOVERNMENT
- 19 ARTICLE A COMPLIANCE FEE OF \$300 FOR EACH KILOWATT-HOUR OF SHORTFALL
- 20 FROM THE AVAILABLE ENERGY CAPACITY OF ENERGY STORAGE DEVICES STARTING
- 21 IN **2021**.

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- 22 (2) THE COMPLIANCE FEE SHALL BE ADJUSTED EACH YEAR FOR
- 23 INFLATION BASED ON THE CONSUMER PRICE INDEX (ELECTRICITY).
- 24 (C) THE COMMISSION MAY ALLOW AN ELECTRICITY SUPPLIER TO INCLUDE
- 25 THE DEMONSTRATION REQUIRED UNDER SUBSECTION (A) OF THIS SECTION IN THE
- 26 REPORT REQUIRED UNDER § 7–705 OF THIS TITLE.
- 27 (D) AN AGGREGATOR OR BROKER THAT ASSISTS AN ELECTRICITY
- 28 CUSTOMER IN PURCHASING ELECTRICITY BUT THAT DOES NOT SUPPLY THE
- 29 ELECTRICITY OR TAKE TITLE TO OR OWNERSHIP OF THE ELECTRICITY MAY REQUIRE
- 30 THE ELECTRICITY SUPPLIER THAT SUPPLIES THE ELECTRICITY TO DEMONSTRATE
- 31 COMPLIANCE WITH THIS SUBTITLE.
 - (E) (1) NOTWITHSTANDING ANY OTHER PROVISION OF THIS SUBTITLE,

- 1 THE COMMISSION MAY GRANT TO AN ELECTRICITY SUPPLIER A WAIVER OF AN
- 2 APPLICABLE DEADLINE UNDER § 7–803 OF THIS SUBTITLE FOR A PERIOD OF 1
- 3 CALENDAR YEAR IF THE COMMISSION DETERMINES THAT ACHIEVING COMPLIANCE
- 4 BY THE APPLICABLE DEADLINE WOULD PRESENT UNDUE HARDSHIP TO:
- 5 (I) THE ELECTRICITY SUPPLIER; OR
- 6 (II) CUSTOMERS OF THE ELECTRICITY SUPPLIER.
- 7 (2) THE COMMISSION MAY PROVIDE TO AN ELECTRICITY SUPPLIER
- 8 ONE OR MORE ADDITIONAL 1-YEAR WAIVERS UNDER PARAGRAPH (1) OF THIS
- 9 SUBSECTION.
- 10 **7-807.**
- 11 (A) AN ELECTRICITY SUPPLIER MAY USE ACCUMULATED ENERGY STORAGE
- 12 CREDITS TO MEET THE ENERGY STORAGE PORTFOLIO STANDARD.
- 13 (B) AN ENERGY STORAGE CREDIT MAY BE SOLD OR OTHERWISE
- 14 TRANSFERRED.
- 15 (C) ONLY IF THE DEMONSTRATED NONCOMPLIANCE DOES NOT RESULT IN
- 16 ENVIRONMENTAL DEGRADATION, AN ELECTRICITY SUPPLIER THAT REASONABLY
- 17 INCLUDES IN ITS ANNUAL REPORT UNDER § 7–806 OF THIS SUBTITLE AN ENERGY
- 18 STORAGE CREDIT THAT IS EXTINGUISHED FOR NONCOMPLIANCE WITH § 7–803 OF
- 19 THIS SUBTITLE:
- 20 (1) MAY CONTINUE TO RELY ON THAT CREDIT FOR THAT YEAR; BUT
- 21 (2) FOR LATER YEARS SHALL:
- 22 (I) DEMONSTRATE A RETURN TO COMPLIANCE OF THE ENERGY
- 23 STORAGE DEVICE UNDER § 7–803 OF THIS SUBTITLE; OR
- 24 (II) REPLACE THE CREDIT WITH AN ENERGY STORAGE CREDIT
- 25 FROM ANOTHER SOURCE.
- 26 **7–808**.
- 27 (A) THE COMMISSION SHALL ADOPT REGULATIONS TO CARRY OUT THIS
- 28 SUBTITLE.
- 29 (B) THE REGULATIONS SHALL INCLUDE:

- 1 (1) TECHNICAL STANDARDS FOR ENERGY STORAGE DEVICES UNDER 2 THIS SUBTITLE, INCLUDING CONSIDERATION OF EFFICIENCY, CYCLE TIME, AND 3 DURABILITY;
- 4 (2) THE DURATION OF AN ENERGY STORAGE CREDIT, WHICH MAY 5 DEPEND ON THE CAPABILITY AND CHARACTERISTICS OF THE ASSOCIATED ENERGY 6 STORAGE DEVICE; AND
- 7 (3) REQUIREMENTS FOR DOCUMENTATION, TRACKING, AND 8 VERIFICATION OF ENERGY STORAGE CREDITS BY LICENSED ELECTRICITY 9 SUPPLIERS AND OTHER PERSONS THAT CREATE AND RECEIVE CREDITS FOR COMPLIANCE WITH THE ENERGY STORAGE PORTFOLIO STANDARD UNDER § 7–803 11 OF THIS SUBTITLE.

12 Article – State Government

- 13 9–20B–05.
- 14 (i) (1) Except as provided in paragraph (2) of this subsection, compliance fees paid under § 7–705(b) of the Public Utilities Article may be used only to make loans and grants to support the creation of new Tier 1 renewable energy sources in the State.
- 17 (2) Compliance fees paid under § 7–705(b)(2)(i)2 of the Public Utilities 18 Article shall be accounted for separately within the Fund and may be used only to make 19 loans and grants to support the creation of new solar energy sources in the State.
- 20 (3) COMPLIANCE FEES PAID UNDER § 7–806(B) OF THE PUBLIC UTILITIES ARTICLE SHALL BE ACCOUNTED FOR SEPARATELY WITHIN THE FUND 22 AND MAY BE USED ONLY TO MAKE LOANS AND GRANTS TO SUPPORT THE 13 INSTALLATION OF NEW ENERGY STORAGE DEVICES IN THE STATE.
- SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall apply to compliance years under Title 7, Subtitle 8 of the Public Utilities Article, as enacted by this Act, starting with calendar year 2017.
- SECTION 3. AND BE IT FURTHER ENACTED, That this Act shall take effect October 1, 2016.