THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

1412 Session of 2017

INTRODUCED BY BARRAR, SAINATO, BARBIN, BOBACK, D. COSTA, FARRY, GILLEN, LONGIETTI, O'NEILL, RAVENSTAHL, RYAN, SOLOMON, WARD, ZIMMERMAN, JAMES AND ROZZI, MAY 19, 2017

AS REPORTED FROM COMMITTEE ON VETERANS AFFAIRS AND EMERGENCY PREPAREDNESS, HOUSE OF REPRESENTATIVES, AS AMENDED, MARCH 12, 2018

AN ACT

1 2 3	Amending Title 66 (Public Utilities) of the Pennsylvania Consolidated Statutes, in restructuring of electric utility industry, providing for microgrid and energy storage.
4	The General Assembly of the Commonwealth of Pennsylvania
5	hereby enacts as follows:
6	Section 1. Title 66 of the Pennsylvania Consolidated <-
7	Statutes is amended by adding a section to read:
8	§ 2816. Microgrid and energy storage.
9	(a) Pilot program. An electric distribution company may
10	propose energy storage or microgrid pilot programs for review
11	and approval by the commission. In determining whether a pilot
12	program under this section is in the public interest, the
13	commission shall consider the potential of the pilot program to:
14	(1) facilitate the use of diverse electric supply
15	options in this Commonwealth, including distributed energy
16	resources; and
17	(2) enhance electric distribution, resiliency and

- 1 <u>operational flexibility.</u>
- 2 (b) Rulemaking. Within five years of the date the first
- 3 pilot program is approved under subsection (a), the commission
- 4 <u>shall evaluate the results of each approved pilot program and</u>
- 5 determine the circumstances under which the ownership,
- 6 development and deployment of energy storage and microgrids by
- 7 <u>electric distribution companies may be in the public interest.</u>
- 8 Within 60 days of the determination, the commission shall
- 9 <u>commence a rulemaking to establish regulations to further the</u>
- 10 deployment of energy storage and microgrids consistent with the
- 11 <u>objectives under subsection (a) (1) and (2). Nothing under the</u>
- 12 <u>rulemaking shall require an electric distribution company to</u>
- 13 <u>own, develop or deploy energy storage or microgrids.</u>
- 14 (c) Recovery. An electric distribution company shall be
- 15 permitted to recover in the electric distribution company's
- 16 distribution rates established under section 1308 (relating to
- 17 voluntary changes in rates) a pretax return on, and a return of,
- 18 the original cost of an energy storage facility or microgrid
- 19 constructed pursuant to an approved pilot program or regulations
- 20 promulgated under this section and the reasonable, prudently
- 21 <u>incurred expenses to operate and maintain the facility.</u>
- 22 (d) Wholesale market participation. Energy storage and
- 23 microgrids authorized under this section may participate in
- 24 wholesale energy markets with net proceeds from participation
- 25 credited to customers.
- 26 (e) Definitions. As used in this section, the following
- 27 words and phrases shall have the meanings given to them in this
- 28 subsection unless the context clearly indicates otherwise:
- 29 "Distributed energy resource." Any of the following:
- 30 (1) A distributed generation resource.

Τ	(2) Energy efficiency.
2	(3) Energy storage.
3	(4) Electric vehicles and charging infrastructure.
4	(5) Demand response technology.
5	"Energy storage." A commercially available technology that
6	is capable of absorbing energy, storing the energy for a period
7	of time and thereafter dispatching the energy.
8	"Island mode." The physical disconnection of a microgrid and
9	customers within the microgrid from the distribution system of
10	the electric distribution company.
11	"Microgrid." A group of interconnected loads and distributed
12	energy resources within clearly defined electrical boundaries
13	that acts as a single controllable entity with respect to an
14	electric distribution company's distribution system which can
15	connect to and disconnect from a distribution system and operate
16	either connected to the distribution system or in island mode.
17	SECTION 1. TITLE 66 OF THE PENNSYLVANIA CONSOLIDATED <-
18	STATUTES IS AMENDED BY ADDING A SECTION TO READ:
19	§ 2816. MICROGRID AND ENERGY STORAGE.
20	(A) PILOT PROJECTS AN ELECTRIC DISTRIBUTION COMPANY MAY
21	PROPOSE ENERGY STORAGE OR MICROGRID PILOT PROJECTS FOR REVIEW
22	AND APPROVAL BY THE COMMISSION. IN DETERMINING WHETHER A PILOT
23	PROJECT UNDER THIS SECTION IS IN THE PUBLIC INTEREST, THE
24	COMMISSION SHALL CONSIDER THE COSTS AND BENEFITS OF THE PROJECT,
25	IN ADDITION TO THE POTENTIAL OF THE PILOT PROJECT TO:
26	(1) FACILITATE THE USE OF DIVERSE ELECTRIC SUPPLY
27	OPTIONS IN THIS COMMONWEALTH, INCLUDING DISTRIBUTED ENERGY
28	RESOURCES; AND
29	(2) ENHANCE ELECTRIC DISTRIBUTION, RESILIENCY AND
30	OPERATIONAL FLEXIBILITY.

Τ	(B) PROJECT REQUIREMENTS
2	(1) A MICROGRID PILOT PROJECT SHALL BE DESIGNED TO
3	SERVE:
4	(I) MULTIPLE CUSTOMER PREMISES, INCLUDING AT LEAST
5	TWO ESSENTIAL PUBLIC PURPOSE ASSETS;
6	(II) A SINGLE PREMISES USED BY A FEDERAL, STATE OR
7	LOCAL GOVERNMENT CUSTOMER OPERATING CRITICAL GOVERNMENT
8	INFRASTRUCTURE AND FACILITIES NECESSARY TO SERVE THE
9	PUBLIC DURING EMERGENCIES; OR
10	(III) A PUBLIC UTILITY PREMISES.
11	(2) A PETITION FILED BY AN ELECTRIC DISTRIBUTION COMPANY
12	SEEKING APPROVAL OF A MICROGRID OR ENERGY STORAGE PILOT
13	PROJECT SHALL INCLUDE ALL OF THE FOLLOWING:
14	(I) THE LOCATION OF EACH DISTRIBUTION SERVICE
15	INTERRUPTION OCCURRING WITHIN THE ELECTRIC DISTRIBUTION
16	COMPANY'S SERVICE TERRITORY IN THE PRECEDING FIVE-YEAR
17	PERIOD.
18	(II) THE NUMBER OF CUSTOMERS, OTHER MICROGRIDS AND
19	ENERGY STORAGE FACILITIES AND CRITICAL GOVERNMENT
20	INFRASTRUCTURE LOCATED IN PROXIMITY TO THE PROPOSED
21	MICROGRID PILOT PROJECT.
22	(3) A MICROGRID PILOT PROJECT MAY INCLUDE DISTRIBUTED
23	ENERGY RESOURCES OWNED BY CUSTOMERS, AN ELECTRIC DISTRIBUTION
24	COMPANY OR OTHER ENTITIES.
25	(4) A DISTRIBUTED ENERGY RESOURCE INCLUDED IN A PILOT
26	PROJECT AND OWNED BY AN ELECTRIC DISTRIBUTION COMPANY SHALL
27	BE COMPETITIVELY PROCURED.
28	(5) THE COMMISSION MAY ESTABLISH REASONABLE COST CAPS ON
29	MICROGRID PILOT PROJECTS.
30	(6) NOTHING UNDER THIS SECTION SHALL BE INTERPRETED TO

- 1 REQUIRE AN ELECTRIC DISTRIBUTION COMPANY TO OWN, DEVELOP OR
- 2 DEPLOY ENERGY STORAGE OR MICROGRIDS.
- 3 (C) COMMISSION REVIEW.--
- 4 (1) FIVE YEARS AFTER THE DATE THE FIRST PILOT PROJECT IS
- 5 APPROVED, THE COMMISSION SHALL EVALUATE THE RESULTS OF EACH
- 6 APPROVED PILOT PROJECT, INCLUDING THE PROJECT COSTS AND
- 7 BENEFITS AND DATA ON THE INTERCONNECTION AND INTEGRATION OF
- 8 <u>DISTRIBUTED ENERGY RESOURCES AND WHOLESALE ENERGY MARKETS.</u>
- 9 (2) WITHIN 180 DAYS OF COMPLETION OF THE EVALUATION
- 10 UNDER PARAGRAPH (1), THE COMMISSION SHALL ISSUE AN ORDER
- 11 <u>DETERMINING WHETHER THE CONTINUED DEVELOPMENT AND DEPLOYMENT</u>
- OF MICROGRIDS AND ENERGY STORAGE FACILITIES IS IN THE PUBLIC
- 13 <u>INTEREST.</u>
- 14 (3) IF THE COMMISSION DETERMINES THAT THE DEVELOPMENT OF
- MICROGRIDS IS IN THE PUBLIC INTEREST, THE COMMISSION MAY
- 16 <u>CONTINUE TO ACCEPT AND CONSIDER PETITIONS SEEKING APPROVAL OF</u>
- 17 <u>MICROGRID PILOT PROJECTS CONSISTENT WITH THE COMMISSION'S</u>
- 18 ORDER.
- 19 (D) REPORT TO THE GENERAL ASSEMBLY.--IF THE COMMISSION
- 20 DETERMINES THAT THE DEVELOPMENT AND DEPLOYMENT OF MICROGRIDS AND
- 21 ENERGY STORAGE FACILITIES ARE IN THE PUBLIC INTEREST, THE
- 22 COMMISSION SHALL, WITHIN 60 DAYS OF ENTRY OF THE ORDER UNDER
- 23 SUBSECTION (C) (2), SUBMIT A REPORT TO THE GENERAL ASSEMBLY
- 24 CONTAINING RECOMMENDATIONS THAT SHALL INCLUDE ALL OF THE
- 25 FOLLOWING:
- 26 (1) THE OWNERSHIP, DEVELOPMENT AND DEPLOYMENT OF
- 27 <u>MICROGRIDS BY ENTITIES OTHER THAN AN ELECTRIC DISTRIBUTION</u>
- 28 COMPANY.
- 29 (2) THE SPECIFIC CIRCUMSTANCES AND CRITERIA UNDER WHICH
- 30 ENERGY STORAGE AND MICROGRIDS SHOULD BE DEVELOPED AND

- 1 DEPLOYED.
- 2 (3) LEGISLATIVE OR OTHER RECOMMENDATIONS THE COMMISSION
- 3 DEEMS APPROPRIATE.
- 4 (E) RECOVERY.--AN ELECTRIC DISTRIBUTION COMPANY MAY RECOVER
- 5 IN THE ELECTRIC DISTRIBUTION COMPANY'S DISTRIBUTION RATES
- 6 ESTABLISHED UNDER SECTION 1308 (RELATING TO VOLUNTARY CHANGES IN
- 7 RATES) REASONABLE AND PRUDENTLY INCURRED COSTS, INCLUDING A
- 8 PRETAX RETURN ON, AND A RETURN OF, THE ORIGINAL COST OF AN
- 9 ENERGY STORAGE FACILITY OR MICROGRID CONSTRUCTED PURSUANT TO AN
- 10 APPROVED PILOT PROJECT AND THE REASONABLE AND PRUDENTLY INCURRED
- 11 EXPENSES TO OPERATE AND MAINTAIN THE FACILITY.
- 12 (F) WHOLESALE MARKET PARTICIPATION.--ENERGY STORAGE AND
- 13 MICROGRIDS PILOT PROJECTS AUTHORIZED UNDER THIS SECTION MAY
- 14 PARTICIPATE IN WHOLESALE ENERGY, CAPACITY AND ANCILLARY SERVICES
- 15 MARKETS. NET PROCEEDS RESULTING FROM THE PARTICIPATION OF A
- 16 DISTRIBUTED ENERGY RESOURCE OWNED BY AN ELECTRIC DISTRIBUTION
- 17 COMPANY IN WHOLESALE ENERGY, CAPACITY OR ANCILLARY MARKETS SHALL
- 18 BE CREDITED TO DISTRIBUTION CUSTOMERS.
- 19 (G) RATE STRUCTURE AND COST ALLOCATION. -- THE COMMISSION
- 20 SHALL DETERMINE THE APPROPRIATE RATE STRUCTURE AND COST
- 21 ALLOCATION FOR THE JUST AND REASONABLE RECOVERY OF PRUDENTLY
- 22 INCURRED COSTS FROM AND THE ALLOCATION OF WHOLESALE MARKET
- 23 PROCEEDS TO DISTRIBUTION CUSTOMERS.
- 24 (H) DEFINITIONS.--AS USED IN THIS SECTION, THE FOLLOWING
- 25 WORDS AND PHRASES SHALL HAVE THE MEANINGS GIVEN TO THEM IN THIS
- 26 SUBSECTION UNLESS THE CONTEXT CLEARLY INDICATES OTHERWISE:
- 27 "DISTRIBUTED ENERGY RESOURCE." ANY OF THE FOLLOWING:
- 28 (1) A DISTRIBUTED GENERATION RESOURCE.
- 29 (2) ENERGY EFFICIENCY.
- 30 (3) ENERGY STORAGE.

- 1 (4) ELECTRIC VEHICLE CHARGING INFRASTRUCTURE.
- 2 (5) DEMAND RESPONSE TECHNOLOGY.
- 3 (6) ANY OTHER PROCESS, RESOURCE OR TECHNOLOGY APPROVED
- 4 BY THE COMMISSION.
- 5 "ENERGY STORAGE." A COMMERCIALLY AVAILABLE TECHNOLOGY THAT
- 6 <u>IS CAPABLE OF ABSORBING ENERGY, STORING THE ENERGY FOR A PERIOD</u>
- 7 OF TIME AND THEREAFTER DISPATCHING THE ENERGY.
- 8 <u>"ESSENTIAL PUBLIC PURPOSE ASSET." A FACILITY OR SITE WHICH</u>
- 9 SUPPORTS CRUCIAL COMMUNITY FUNCTIONS INCLUDING, PUBLIC SAFETY
- 10 ANSWERING POINTS, POLICE STATIONS, FIRE COMPANIES AND FIRE
- 11 <u>DEPARTMENTS</u>, <u>EMERGENCY MEDICAL SERVICES AGENCIES</u>, <u>PUBLIC WORKS</u>,
- 12 PUBLIC TRANSPORTATION, EMERGENCY SHELTERS, GROCERY STORES, GAS
- 13 STATIONS AND OTHER ENTITIES THAT PROVIDE ACCESS TO FOOD, WATER
- 14 OR SHELTER WHEN A MICROGRID IS OPERATING IN ISLAND MODE.
- 15 "ISLAND MODE." THE PHYSICAL DISCONNECTION OF A MICROGRID AND
- 16 <u>CUSTOMERS WITHIN THE MICROGRID FROM THE DISTRIBUTION SYSTEM OF</u>
- 17 THE ELECTRIC DISTRIBUTION COMPANY.
- 18 "MICROGRID." A GROUP OF INTERCONNECTED LOADS AND DISTRIBUTED
- 19 ENERGY RESOURCES WITHIN CLEARLY DEFINED ELECTRICAL BOUNDARIES
- 20 THAT ACTS AS A SINGLE CONTROLLABLE ENTITY WITH RESPECT TO AN
- 21 ELECTRIC DISTRIBUTION COMPANY'S DISTRIBUTION SYSTEM WHICH CAN
- 22 CONNECT TO AND DISCONNECT FROM A DISTRIBUTION SYSTEM AND OPERATE
- 23 EITHER CONNECTED TO THE DISTRIBUTION SYSTEM OR IN ISLAND MODE.
- 24 Section 2. This act shall take effect in 60 days.