

HOUSE BILL 163

M5, C5

9lr0138

By: **Chair, Economic Matters Committee (By Request – Departmental – Maryland Energy Administration)**

Introduced and read first time: January 23, 2019

Assigned to: Economic Matters

A BILL ENTITLED

1 AN ACT concerning

2 **Electricity – Combined Heat and Power Systems – Metering**

3 FOR the purpose of requiring the Public Service Commission to establish a Combined Heat
4 and Power System Program; allowing all rate classes to participate in the program;
5 requiring an electric company to use a certain tariff structure to provide credits to
6 owner–operators under the program; requiring a combined heat and power system
7 to satisfy certain requirements and meet certain criteria; authorizing the export of
8 excess generation from a system in a certain manner; providing certain regulatory
9 authority for the program; providing certain regulatory authority for interconnection
10 of certain systems; providing certain limitations on combined heat and power system
11 ownership and operation; requiring the Commission to adopt certain regulations for
12 the program, including certain combined heat and power system tariffs and
13 protocols; providing for continuity of certain contracts and services related to
14 combined heat and power systems if the program terminates; requiring an electric
15 company to calculate certain credits for certain owner–operators in a certain
16 manner; providing for the accrual and payment of certain credits; stating certain
17 findings of the General Assembly; providing that a combined heat and power system
18 is not an electric company, an electricity supplier, or a generating station; defining
19 certain terms; and generally relating to electricity regulation and combined heat and
20 power systems.

21 BY adding to

22 Article – Public Utilities

23 Section 7–306.3

24 Annotated Code of Maryland

25 (2010 Replacement Volume and 2018 Supplement)

26 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,

27 That the Laws of Maryland read as follows:

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



Article – Public Utilities

7-306.3.

(A) (1) IN THIS SECTION THE FOLLOWING WORDS HAVE THE MEANINGS INDICATED.

(2) “ANNUAL EXCESS GENERATION PAYMENT” MEANS AN ANNUAL PAYMENT MADE BY AN ELECTRIC COMPANY TO AN OWNER-OPERATOR FOR THE VALUE OF CREDITS THAT EXCEEDS THE TOTAL ANNUAL ELECTRICITY DEMAND OF THE OWNER-OPERATOR.

(3) “ANNUAL THERMAL LOAD” MEANS:

(I) AN OWNER-OPERATOR’S ACCUMULATED THERMAL LOAD IN MILLION BRITISH THERMAL UNITS FOR THE 12 MONTHS IMMEDIATELY PRECEDING THE OWNER-OPERATOR’S INSTALLATION AND USE OF A COMBINED HEAT AND POWER SYSTEM; OR

(II) FOR AN OWNER-OPERATOR THAT DOES NOT HAVE A RECORD OF 12 MONTHS OF ACCUMULATED THERMAL LOAD IN MILLION BRITISH THERMAL UNITS FOR THE 12 MONTHS IMMEDIATELY PRECEDING THE OWNER-OPERATOR’S INSTALLATION AND USE OF A COMBINED HEAT AND POWER SYSTEM, AN ESTIMATE OF THE OWNER-OPERATOR’S CUMULATIVE 12-MONTH THERMAL LOAD IN MILLION BRITISH THERMAL UNITS, DETERMINED IN A MANNER THE COMMISSION APPROVES.

(4) “COMBINED HEAT AND POWER METERING” MEANS MEASUREMENT OF THE DIFFERENCE BETWEEN THE KILOWATT-HOURS OR VALUE OF ELECTRICITY THAT IS SUPPLIED BY AN ELECTRIC COMPANY AND THE KILOWATT-HOURS OR VALUE OF ELECTRICITY ATTRIBUTABLE TO AN OWNER-OPERATOR OF A COMBINED HEAT AND POWER SYSTEM AND FED BACK TO THE ELECTRIC GRID OVER THE OWNER-OPERATOR’S BILLING PERIOD, AS CALCULATED UNDER THE TARIFFS ESTABLISHED UNDER SUBSECTION (E)(2) OF THIS SECTION.

(5) “COMBINED HEAT AND POWER SYSTEM” OR “SYSTEM” MEANS AN ENERGY SYSTEM THAT:

(I) IS CONNECTED TO THE ELECTRIC DISTRIBUTION GRID SERVING THE STATE;

(II) IS LOCATED ON THE SAME SITE AS ITS OWNER-OPERATOR;

1 (III) HAS ITS OWN ELECTRIC METER;

2 (IV) CREDITS ITS GENERATED ELECTRICITY, OR THE VALUE OF
3 ITS GENERATED ELECTRICITY, TO THE OWNER-OPERATOR THROUGH COMBINED
4 HEAT AND POWER METERING;

5 (V) MAY NOT BE HELD OR OPERATED BY AN INVESTOR-OWNED
6 UTILITY;

7 (VI) CONCURRENTLY PRODUCES USEFUL THERMAL ENERGY
8 ALONG WITH ELECTRICITY OR MECHANICAL POWER; AND

9 (VII) HAS A GENERATING CAPACITY THAT:

10 1. IS AT LEAST 30 KILOWATTS; AND

11 2. DOES NOT EXCEED 20 MEGAWATTS.

12 (6) "CREDIT" MEANS THE MONETARY VALUE OF EXCESS GENERATION
13 ASSIGNED TO AN OWNER-OPERATOR BASED ON THE CALCULATION OF THE
14 WHOLESALE PORTION OF THE ELECTRICITY RATE AS THE COMMISSION
15 DETERMINES.

16 (7) "EXCESS GENERATION" MEANS THE ELECTRICAL OUTPUT OF A
17 COMBINED HEAT AND POWER SYSTEM IN KILOWATT-HOURS THAT EXCEEDS THE
18 ELECTRICAL DEMAND OF THE OWNER-OPERATOR.

19 (8) "OWNER-OPERATOR" MEANS A PERSON THAT:

20 (I) OWNS OR OPERATES A COMBINED HEAT AND POWER
21 SYSTEM; OR

22 (II) CONTRACTS WITH A THIRD PARTY THAT FINANCES, BUILDS,
23 OWNS, OR OPERATES A COMBINED HEAT AND POWER SYSTEM FOR THE BENEFIT OF
24 THE PERSON.

25 (9) "PROGRAM" MEANS THE COMBINED HEAT AND POWER SYSTEM
26 PROGRAM UNDER THIS SECTION.

27 (10) "SYSTEM COMMISSIONING" MEANS THE MOMENT A COMBINED
28 HEAT AND POWER SYSTEM BEGINS COMMERCIAL OPERATION AFTER ALL
29 COMPONENTS OF THE SYSTEM HAVE SATISFIED DESIGN, INSTALLATION,

1 OPERATIONAL, AND PROGRAM REQUIREMENTS.

2 (B) THE GENERAL ASSEMBLY FINDS THAT:

3 (1) COMBINED HEAT AND POWER SYSTEMS:

4 (I) PROVIDE RESIDENTS AND BUSINESSES INCREASED ACCESS
5 TO GRID STABILITY;

6 (II) ENHANCE CONTINUED DIVERSIFICATION OF THE STATE'S
7 ENERGY RESOURCE MIX TO ACHIEVE THE STATE'S GREENHOUSE GAS REDUCTION
8 GOALS;

9 (III) PROVIDE ELECTRIC COMPANIES AND RATEPAYERS THE
10 OPPORTUNITY TO REALIZE THE BENEFITS ASSOCIATED WITH DISTRIBUTED ENERGY
11 AND COMBINED HEAT AND POWER SYSTEMS;

12 (IV) ENCOURAGE PRIVATE INVESTMENT IN ENERGY RESOURCES
13 THAT ASSIST IN THE REDUCTION OF GREENHOUSE GASES;

14 (V) REDUCE COSTS OF INTERCONNECTION AND
15 ADMINISTRATION; AND

16 (VI) STIMULATE IN-STATE ECONOMIC GROWTH; AND

17 (2) IT IS IN THE PUBLIC INTEREST THAT THE STATE ENABLE THE
18 DEVELOPMENT AND DEPLOYMENT OF ENERGY GENERATION FROM COMBINED HEAT
19 AND POWER SYSTEMS IN ORDER TO:

20 (I) INCREASE ENERGY SECURITY AND RESILIENCE; AND

21 (II) FACILITATE MARKET ENTRY FOR ALL POTENTIAL ASSET
22 DEVELOPMENT BY REDUCING MARKET BARRIERS.

23 (C) A COMBINED HEAT AND POWER SYSTEM, INCLUDING AN
24 OWNER-OPERATOR OR A MUNICIPAL OWNER-OPERATOR OF THE SYSTEM, IS NOT:

25 (1) AN ELECTRIC COMPANY;

26 (2) AN ELECTRICITY SUPPLIER; OR

27 (3) A GENERATING STATION.

1 **(D) (1) THE COMMISSION SHALL ESTABLISH A COMBINED HEAT AND**
2 **POWER SYSTEM PROGRAM.**

3 **(2) ALL RATE CLASSES MAY PARTICIPATE IN THE PROGRAM.**

4 **(3) AN ELECTRIC COMPANY SHALL USE THE TARIFF STRUCTURE**
5 **APPROVED UNDER SUBSECTION (E)(2) OF THIS SECTION TO PROVIDE EACH**
6 **OWNER-OPERATOR WITH CREDIT.**

7 **(4) AN OWNER-OPERATOR MAY NOT RECEIVE CREDIT FOR EXCESS**
8 **GENERATION IF THE COMBINED HEAT AND POWER SYSTEM:**

9 **(I) FAILS TO ACHIEVE A COMBINED HEAT AND POWER SYSTEM**
10 **EFFICIENCY OF AT LEAST 60% ON A HIGHER HEATING VALUE BASED ON THE HIGHER**
11 **HEATING VALUE OF THE FUEL;**

12 **(II) PRODUCES THERMAL ENERGY IN EXCESS OF THE ANNUAL**
13 **THERMAL LOAD OF THE OWNER-OPERATOR; OR**

14 **(III) FAILS TO MAINTAIN A COMPREHENSIVE WARRANTY OR**
15 **SERVICE CONTRACT FOR THE FIRST 5 YEARS AFTER SYSTEM COMMISSIONING.**

16 **(5) A COMBINED HEAT AND POWER SYSTEM MUST SATISFY ALL**
17 **APPLICABLE REGULATORY AND ENVIRONMENTAL REQUIREMENTS.**

18 **(6) EXCESS GENERATION OF A COMBINED HEAT AND POWER SYSTEM**
19 **MAY BE EXPORTED FOR SALE, IN ACCORDANCE WITH AN INTERCONNECTION,**
20 **OPERATION, AND MAINTENANCE AGREEMENT WITH THE ELECTRIC COMPANY, ONLY**
21 **AT A RATE EQUAL TO THE CALCULATION OF THE WHOLESALE PORTION OF THE**
22 **ELECTRICITY RATE AS THE COMMISSION DETERMINES.**

23 **(7) AN ELECTRIC COMPANY SHALL USE ENERGY GENERATED FROM A**
24 **COMBINED HEAT AND POWER SYSTEM TO OFFSET PURCHASES FROM ELECTRICITY**
25 **SUPPLIERS.**

26 **(8) THE COMMISSION SHALL DETERMINE INTERCONNECTION**
27 **REQUIREMENTS INCLUSIVE OF COSTS FOR ELECTRIC SERVICE TERRITORIES THAT**
28 **ARE NOT SUBJECT TO § 7-211 OF THIS TITLE.**

29 **(9) AN OWNER-OPERATOR MAY PETITION AN ELECTRIC COMPANY TO**
30 **COORDINATE THE INTERCONNECTION AND BEGINNING OF OPERATIONS OF A**
31 **COMBINED HEAT AND POWER SYSTEM AFTER THE COMMISSION ADOPTS**
32 **REGULATIONS REQUIRED UNDER SUBSECTION (E) OF THIS SECTION.**

1 **(10) AN OWNER-OPERATOR ORGANIZATION MAY CONTRACT WITH A**
2 **THIRD PARTY FOR THE THIRD PARTY TO FINANCE, BUILD, OWN, OR OPERATE A**
3 **COMBINED HEAT AND POWER SYSTEM.**

4 **(11) A MUNICIPAL UTILITY OR COOPERATIVE UTILITY:**

5 **(I) MAY PARTICIPATE IN THE PROGRAM; AND**

6 **(II) IS EXCLUDED FROM THE REQUIREMENTS OF SUBSECTION**
7 **(A)(5)(V) OF THIS SECTION.**

8 **(12) THE PROGRAM SHALL BEGIN AFTER THE COMMISSION ADOPTS**
9 **THE REGULATIONS REQUIRED UNDER SUBSECTION (E) OF THIS SECTION.**

10 **(13) AN ELECTRIC COMPANY SERVING AN OWNER-OPERATOR SHALL**
11 **ENSURE THAT THE METER INSTALLED FOR COMBINED HEAT AND POWER METERING**
12 **IS CAPABLE OF MEASURING THE FLOW OF ELECTRICITY IN TWO DIRECTIONS.**

13 **(14) THE COMMISSION SHALL REQUIRE ELECTRIC COMPANIES TO**
14 **DEVELOP A STANDARD CONTRACT OR TARIFF FOR COMBINED HEAT AND POWER**
15 **METERING AND MAKE IT AVAILABLE TO OWNER-OPERATORS.**

16 **(E) ON OR BEFORE OCTOBER 1, 2020, THE COMMISSION SHALL ADOPT**
17 **REGULATIONS TO IMPLEMENT THIS SECTION, INCLUDING REGULATIONS FOR:**

18 **(1) CONSUMER PROTECTION;**

19 **(2) A TARIFF STRUCTURE FOR AN ELECTRIC COMPANY TO PROVIDE**
20 **AN OWNER-OPERATOR WITH THE KILOWATT-HOURS OR VALUE OF THE**
21 **OWNER-OPERATOR'S EXCESS GENERATION, AS THE COMMISSION DETERMINES;**

22 **(3) A CALCULATION FOR COMBINED HEAT AND POWER METERING AS**
23 **THE COMMISSION DETERMINES;**

24 **(4) A PROTOCOL FOR ELECTRIC COMPANIES, ELECTRICITY**
25 **SUPPLIERS, AND OWNER-OPERATORS TO COMMUNICATE THE INFORMATION**
26 **NECESSARY TO CALCULATE AND PROVIDE THE MONTHLY ELECTRIC COMPANY BILL**
27 **CREDITS AND YEARLY NET EXCESS GENERATION PAYMENTS REQUIRED BY THIS**
28 **SECTION; AND**

29 **(5) A PROTOCOL FOR AN OWNER-OPERATOR ORGANIZATION TO**
30 **COORDINATE WITH AN ELECTRIC COMPANY FOR THE INTERCONNECTION AND**

1 BEGINNING OF OPERATIONS OF A COMBINED HEAT AND POWER SYSTEM.

2 (F) (1) SUBJECT TO REGULATIONS OR ORDERS OF THE COMMISSION, A
3 CONTRACT RELATING TO A COMBINED HEAT AND POWER SYSTEM OR
4 AN OWNER-OPERATOR ORGANIZATION THAT IS ENTERED INTO UNDER THE
5 PROGRAM SHALL REMAIN IN EFFECT ACCORDING TO THE TERMS OF THE CONTRACT,
6 INCLUDING AFTER ANY TERMINATION OF THE PROGRAM.

7 (2) IF THE PROGRAM TERMINATES, IN ACCORDANCE WITH THE
8 OPERATIONAL AND BILLING REQUIREMENTS OF THIS SECTION:

9 (I) AN EXISTING OWNER-OPERATOR MAY CONTINUE THE
10 OPERATION AND MAINTENANCE OF A COMBINED HEAT AND POWER SYSTEM THAT
11 WAS APPROVED DURING THE PROGRAM, INCLUDING REPLACEMENT OF THE
12 COMBINED HEAT AND POWER SYSTEM; AND

13 (II) IN ACCORDANCE WITH THE TARIFFS ESTABLISHED UNDER
14 SUBSECTION (E)(2) OF THIS SECTION, AN ELECTRIC COMPANY SHALL CONTINUE TO
15 FACILITATE THE OPERATION OF A COMBINED HEAT AND POWER SYSTEM THAT WAS
16 APPROVED OR ITS REPLACEMENT.

17 (G) (1) THE ELECTRIC COMPANY SHALL CALCULATE COMBINED HEAT
18 AND POWER METERING IN ACCORDANCE WITH THIS SUBSECTION.

19 (2) EXCESS GENERATION SHALL BE MEASURED IN ACCORDANCE
20 WITH STANDARD METERING PRACTICES.

21 (3) IF ELECTRICITY SUPPLIED BY THE GRID EXCEEDS ELECTRICITY
22 GENERATED BY THE OWNER-OPERATOR DURING A MONTH, THE
23 OWNER-OPERATOR SHALL BE BILLED FOR THE ENERGY SUPPLIED, LESS CREDITS IN
24 ACCORDANCE WITH SUBSECTION (E) OF THIS SECTION.

25 (4) IF ELECTRICITY GENERATED BY THE OWNER-OPERATOR
26 EXCEEDS THE ELECTRICITY SUPPLIED BY THE GRID, THE
27 OWNER-OPERATOR SHALL BE BILLED ONLY CUSTOMER CHARGES FOR THAT MONTH
28 IN ACCORDANCE WITH SUBSECTION (E) OF THIS SECTION.

29 (5) (I) AN OWNER-OPERATOR UNDER PARAGRAPH (4) OF THIS
30 SUBSECTION MAY ACCRUE EXCESS GENERATION FOR A PERIOD:

31 1. NOT TO EXCEED 12 MONTHS; AND

32 2. THAT ENDS WITH THE BILLING CYCLE THAT IS

1 COMPLETE BEFORE THE END OF APRIL OF EACH YEAR.

2 (II) THE ELECTRIC COMPANY SHALL CARRY FORWARD NET
3 EXCESS GENERATION UNTIL:

4 1. THE OWNER-OPERATOR'S CONSUMPTION OF
5 ELECTRICITY FROM THE GRID ELIMINATES THE CREDITS; OR

6 2. THE ACCRUAL PERIOD UNDER SUBPARAGRAPH (I) OF
7 THIS PARAGRAPH EXPIRES.

8 (III) 1. THE DOLLAR VALUE OF EXCESS GENERATION SHALL
9 BE EQUAL TO CALCULATION OF THE WHOLESALE PORTION OF THE ELECTRICITY
10 RATE, AS THE COMMISSION DETERMINES, AVERAGED OVER THE PREVIOUS
11 12-MONTH PERIOD ENDING WITH THE BILLING CYCLE THAT IS COMPLETE BEFORE
12 THE END OF APRIL MULTIPLIED BY THE NUMBER OF KILOWATT-HOURS OF EXCESS
13 GENERATION.

14 2. FOR OWNER-OPERATORS SERVED BY AN
15 ELECTRICITY SUPPLIER, THE DOLLAR VALUE OF THE NET EXCESS GENERATION
16 SHALL BE EQUAL TO THE CALCULATION OF THE WHOLESALE PORTION OF THE
17 ELECTRICITY RATE, AS THE COMMISSION DETERMINES, MULTIPLIED BY THE
18 NUMBER OF KILOWATT-HOURS OF NET EXCESS GENERATION.

19 (6) (I) WITHIN 30 DAYS AFTER THE BILLING CYCLE THAT IS
20 COMPLETE BEFORE THE END OF APRIL OF EACH YEAR, THE ELECTRIC COMPANY
21 SHALL PAY EACH OWNER-OPERATOR AN ANNUAL EXCESS GENERATION PAYMENT
22 FOR THE DOLLAR VALUE OF ANY ACCRUED CREDITS REMAINING AT THE END OF THE
23 PREVIOUS 12-MONTH PERIOD ENDING WITH THE BILLING CYCLE THAT IS
24 COMPLETE BEFORE THE END OF APRIL.

25 (II) WITHIN 15 DAYS AFTER THE DATE THE OWNER-OPERATOR
26 CLOSES THE OWNER-OPERATOR'S ACCOUNT, THE ELECTRIC COMPANY SHALL PAY
27 THE OWNER-OPERATOR FOR THE DOLLAR VALUE OF ANY ACCRUED CREDITS
28 REMAINING AT THE TIME THE OWNER-OPERATOR CLOSES THE ACCOUNT.

29 (7) (I) NOTWITHSTANDING PARAGRAPHS (5) AND (6) OF THIS
30 SUBSECTION, AN OWNER-OPERATOR SERVED BY AN ELECTRIC COOPERATIVE THAT
31 SERVES A POPULATION OF FEWER THAN 250,000 IN ITS DISTRIBUTION TERRITORY
32 MAY CHOOSE TO BE PAID FOR THE DOLLAR VALUE OF EXCESS GENERATION
33 REMAINING AT THE END OF EACH MONTH INSTEAD OF AT THE END OF THE ACCRUAL
34 PERIOD SPECIFIED UNDER PARAGRAPH (5)(I) OF THIS SUBSECTION.

1 **(II) IF AN OWNER-OPERATOR CHOOSES TO BE PAID FOR THE**
2 **DOLLAR VALUE OF EXCESS GENERATION REMAINING AT THE END OF EACH MONTH:**

3 **1. THE OWNER-OPERATOR MAY ACCRUE EXCESS**
4 **GENERATION ON A MONTHLY BASIS;**

5 **2. THE DOLLAR VALUE OF THE EXCESS GENERATION**
6 **SHALL BE EQUAL TO THE CALCULATION OF THE WHOLESALE PORTION OF THE**
7 **ELECTRICITY RATE, AS THE COMMISSION DETERMINES, FOR THE PREVIOUS MONTH;**
8 **AND**

9 **3. WITHIN 30 DAYS AFTER THE END OF EACH MONTH,**
10 **THE ELECTRIC COOPERATIVE SHALL PAY THE OWNER-OPERATOR FOR THE DOLLAR**
11 **VALUE OF EXCESS GENERATION REMAINING AT THE END OF THE PREVIOUS MONTH.**

12 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect
13 October 1, 2019.