

HOUSE BILL 1389

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By: **Delegate Mizeur**

Introduced and read first time: February 8, 2008

Assigned to: Economic Matters

A BILL ENTITLED

1 AN ACT concerning

2 **Maryland Smart Grid Initiative**

3 FOR the purpose of establishing a pilot program on smart grid deployment under the
4 authority of the Public Service Commission; stating certain findings of the
5 General Assembly; providing for the purposes of the pilot program; requiring
6 the Commission to conduct certain proceedings concerning the pilot program;
7 requiring the initial deployment of smart grid technology under the pilot
8 program to begin on or before a certain date; authorizing a certain electric
9 company to recover certain costs under certain circumstances; requiring the
10 Maryland Energy Administration, along with a certain electric company and a
11 certain smart grid company, to submit a certain joint application to the U.S.
12 Department of Energy for certain Smart Grid Funding Programs; requiring
13 certain funding received from a certain program to be used by the
14 Administration, in coordination with the Commission, the electric company, and
15 the smart grid company, in a certain manner; authorizing the Commission to
16 use certain funds from the sale of certain carbon allowances under the Regional
17 Greenhouse Gas Initiative and certain other funds in a certain manner;
18 requiring the Commission to make certain reports to certain committees on or
19 before a certain date each year; defining a certain term; and generally relating
20 to a pilot program on smart grid deployment.

21 BY adding to
22 Article – Public Utility Companies
23 Section 7–106
24 Annotated Code of Maryland
25 (1998 Volume and 2007 Supplement)

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

28 **Article – Public Utility Companies**

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



1 **7-106.**

2 (A) IN THIS SECTION, "SMART GRID" MEANS A TWO-WAY
3 COMMUNICATIONS SYSTEM AND ASSOCIATED EQUIPMENT AND SOFTWARE,
4 INCLUDING EQUIPMENT INSTALLED ON AN ELECTRIC CUSTOMER'S PREMISES,
5 THAT USES THE ELECTRIC COMPANY'S DISTRIBUTION NETWORK TO PROVIDE
6 REAL-TIME MONITORING, DIAGNOSTIC, AND CONTROL INFORMATION AND
7 SERVICES THAT IMPROVE THE EFFICIENCY AND RELIABILITY OF THE
8 DISTRIBUTION AND USE OF ELECTRICITY, INCLUDING:

9 (1) DISTRIBUTION EQUIPMENT AUTOMATION;

10 (2) AUTOMATED LOAD CONTROL OR DEMAND RESPONSE;

11 (3) POWER LOSS DETECTION AND PREVENTION;

12 (4) REMOTE OUTAGE AND RESTORATION DETECTION;

13 (5) DYNAMIC PRICING OF SERVICE;

14 (6) MONITORING OF DISTRIBUTION NETWORK PERFORMANCE;

15 AND

16 (7) PREDICTIVE MAINTENANCE AND DIAGNOSTICS.

17 (B) THE GENERAL ASSEMBLY FINDS THAT:

18 (1) SMART GRID IS A TECHNOLOGY PLATFORM THAT MAY BE
19 USED TO ENHANCE EXISTING ELECTRICITY DELIVERY SYSTEMS AND MAY
20 RESULT IN IMPROVED SERVICE AND RELIABILITY FOR ELECTRICITY
21 CUSTOMERS;

22 (2) SMART GRID OFFERED THROUGH TECHNOLOGY THAT USES
23 ELECTRIC LINES OFFERS A MEANS OF PROVIDING ALTERNATIVE BROADBAND
24 SERVICES TO HOMES AND BUSINESSES;

25 (3) SMART GRID DEPLOYMENT CAN HELP MARYLAND MEET ITS
26 ENERGY POLICY GOALS, INCLUDING REDUCING GREENHOUSE GAS EMISSIONS
27 AND REDUCING RELIANCE ON FOSSIL FUELS;

28 (4) CONSISTENT WITH THE GOALS OF REDUCING THE IMPACT OF
29 CLIMATE CHANGE, INCREASING ENERGY INDEPENDENCE, AND STIMULATING
30 THE GROWTH OF HIGH TECHNOLOGY, MANUFACTURING, AND OTHER JOBS IN

1 MARYLAND, IT IS IN THE PUBLIC INTEREST TO ENCOURAGE THE DEPLOYMENT
2 OF SMART GRID BY ALLOWING AFFILIATES OF AN ELECTRIC COMPANY, OR
3 ALLOWING UNAFFILIATED ENTITIES, TO OWN OR OPERATE ALL OR A PORTION
4 OF A SMART GRID SYSTEM; AND

5 (5) A PILOT PROGRAM OF DEPLOYMENT OF SMART GRID
6 TECHNOLOGY WILL ASSIST THE GENERAL ASSEMBLY AND THE PUBLIC BY
7 PROVIDING ACCURATE DATA AND APPLICABLE EXPERIENCE THAT WILL BE
8 VALUABLE IN ASSESSING THE POTENTIAL ADVANTAGES AND COSTS OF A
9 LARGE-SCALE DEPLOYMENT OF SMART GRID TECHNOLOGY IN THE STATE.

10 (C) THERE IS A PILOT PROGRAM ON SMART GRID DEPLOYMENT
11 ADMINISTERED BY THE COMMISSION.

12 (D) THE PURPOSE OF THE PILOT PROGRAM IS TO OBTAIN AN ACCURATE
13 ASSESSMENT OF THE BENEFITS OF SMART GRID TECHNOLOGY, INCLUDING:

14 (1) DEMONSTRATING IMPROVEMENT OF RELIABILITY AND
15 EFFICIENCY OF THE DISTRIBUTION GRID, INCLUDING:

16 (I) REDUCTION IN TIME TO DETECT POWER OUTAGES;

17 (II) REDUCTION IN TIME TO REPAIR UNDERGROUND CABLE
18 FAULTS;

19 (III) DETECTION AND REPAIR OF POTENTIAL DISTRIBUTION
20 GRID EQUIPMENT FAILURES; AND

21 (IV) IMPROVED RELIABILITY INDICES; AND

22 (2) DEMONSTRATING BENEFITS TO ELECTRICITY CUSTOMERS,
23 INCLUDING:

24 (I) REAL-TIME LOAD REDUCTION AND DEPLOYMENT OF
25 PROGRAMMABLE COMMUNICATED THERMOSTATS THAT PROVIDE
26 AIR-CONDITIONING LOAD CONTROL WITH MINIMAL CUSTOMER
27 INCONVENIENCE;

28 (II) REAL-TIME LOAD REDUCTION AND DIRECT LOAD
29 CONTROL SWITCHES THAT CONTROL DEVICES SUCH AS WATER HEATERS, POOL
30 PUMPS, AND AIR-CONDITIONING COMPRESSORS; AND

31 (III) HOME AREA NETWORK ENABLED DEVICES SUCH AS
32 IN-HOME ENERGY DISPLAY.

1 **(E) THE COMMISSION SHALL CONDUCT APPROPRIATE PROCEEDINGS**
2 **TO DETERMINE THE SCOPE AND NATURE OF THE PILOT PROGRAM ESTABLISHED**
3 **UNDER THIS SECTION, INCLUDING:**

4 **(1) THE NUMBER OF ELECTRIC CUSTOMERS IN AN ELECTRIC**
5 **COMPANY'S SERVICE TERRITORY THAT WILL BE INCLUDED IN THE PILOT**
6 **PROGRAM;**

7 **(2) THE EXTENT AND TYPE OF SMART GRID TECHNOLOGY TO BE**
8 **INSTALLED AND OPERATED THROUGH THE PILOT PROGRAM;**

9 **(3) THE COORDINATION OF THE DEPLOYMENT OF THE SMART**
10 **GRID TECHNOLOGY;**

11 **(4) THE DISSEMINATION OF INFORMATION ON THE DEPLOYMENT**
12 **OF SMART GRID TECHNOLOGY TO ELECTRIC CUSTOMERS THAT WILL BE**
13 **AFFECTED BY THE PILOT PROGRAM; AND**

14 **(5) THE GEOGRAPHIC AREA IN WHICH TO OPERATE THE PILOT**
15 **PROGRAM.**

16 **(F) THE INITIAL DEPLOYMENT OF SMART GRID TECHNOLOGY UNDER**
17 **THIS PILOT PROGRAM SHALL BEGIN ON OR BEFORE JUNE 1, 2009.**

18 **(G) AN ELECTRIC COMPANY IN WHOSE SERVICE TERRITORY SMART**
19 **GRID TECHNOLOGY IS DEPLOYED UNDER THE PILOT PROGRAM MAY RECOVER**
20 **ANY COSTS THAT THE ELECTRIC COMPANY INCURS FROM THE DEPLOYMENT OF**
21 **SMART GRID TECHNOLOGY BY A SURCHARGE ON THE SERVICES PROVIDED TO**
22 **EACH CUSTOMER AND PLACED ON THE PERIODIC BILL THAT THE CUSTOMER**
23 **RECEIVES FROM THE ELECTRIC COMPANY.**

24 **(H) ON OR BEFORE DECEMBER 31 OF EACH YEAR, BEGINNING IN 2010,**
25 **THE PUBLIC SERVICE COMMISSION SHALL REPORT IN ACCORDANCE WITH §**
26 **2-1246 OF THE STATE GOVERNMENT ARTICLE TO THE SENATE FINANCE**
27 **COMMITTEE AND THE HOUSE ECONOMIC MATTERS COMMITTEE ON:**

28 **(1) THE STATUS OF THE PILOT PROGRAM; AND**

29 **(2) THE MEASURABLE COSTS AND BENEFITS OF THE PILOT**
30 **PROGRAM FOR ELECTRIC COMPANIES AND ELECTRICITY CUSTOMERS.**

31 SECTION 2. AND BE IT FURTHER ENACTED, That:

1 (a) (1) As soon as federal funding is made available, the Maryland Energy
2 Administration, together with at least one electric company and one smart grid
3 company to be chosen by the Director of the Administration, shall submit a joint
4 application to the U.S. Department of Energy for the Smart Grid Funding Programs
5 set forth in Title XIII, Sections 1304 and 1306 of the United States Energy
6 Independence and Security Act of 2007, P. L. 110–140.

7 (2) Any funding received from the federal Smart Grid Funding
8 Programs shall be used by the Maryland Energy Administration, in coordination with
9 the Public Service Commission, and the electric company and smart grid company that
10 submit the application in accordance with paragraph (1) of this subsection to off-set
11 costs associated with the pilot program established under Section 1 of this Act.

12 (b) The Public Service Commission may use the following funds to off-set
13 costs associated with the pilot program established in Section 1 of this Act:

14 (1) funds that are unencumbered and available from the sale of carbon
15 allowances to electricity generators under the Regional Greenhouse Gas Initiative;
16 and

17 (2) any other funds from any other source accepted for the benefit of
18 the pilot program established in Section 1 of this Act.

19 SECTION 3. AND BE IT FURTHER ENACTED, That this Act shall take effect
20 June 1, 2008.