

112TH CONGRESS  
1ST SESSION

# S. 1029

To amend the Public Utility Regulatory Policies Act of 1978 to provide electric consumers the right to access certain electric energy information, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

MAY 19, 2011

Mr. UDALL of Colorado (for himself and Mr. BROWN of Massachusetts) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

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## A BILL

To amend the Public Utility Regulatory Policies Act of 1978 to provide electric consumers the right to access certain electric energy information, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Electric Consumer  
5 Right to Know Act” or the “e-KNOW Act”.

6 **SEC. 2. FINDINGS.**

7 Congress finds that—

8 (1) improving consumers’ understanding of and  
9 access to the electric energy usage information of

1 the consumers will help consumers more effectively  
2 manage usage;

3 (2) consumers have a right of access to the  
4 electric energy usage information of the consumers;

5 (3) the right of access to electric energy usage  
6 information should be based on the need to have ac-  
7 cess to the information rather than on a specific  
8 type of smart metering technology and, as a result,  
9 all usage information platforms can compete and in-  
10 novation will be fostered;

11 (4) utilities should provide electric energy usage  
12 information based on the best capabilities of the me-  
13 tering technology currently deployed in the respec-  
14 tive service areas or, on upgrade, based on standards  
15 recognized by the National Institute of Standards  
16 and Technology;

17 (5) consumers should have the ability to access  
18 unaudited usage information directly from the elec-  
19 tric meters of the consumers or from sources inde-  
20 pendent of the electric meters, and from sources  
21 independent of the utilities of the consumers;

22 (6) consumers should retain the right to the  
23 privacy and security of electric energy usage infor-  
24 mation of the consumers created through usage;

1           (7) consumers should have the right to control  
 2           the electric energy usage information of the con-  
 3           sumers and the right to privacy for the information  
 4           when third party aggregators of data are involved in  
 5           creation, management, or collection of the informa-  
 6           tion; and

7           (8) consumers should have the right to know  
 8           how the authorized third-party data manager of the  
 9           consumers will manage the retail electric energy in-  
 10          formation of the consumers once the manager has  
 11          accessed the information.

12 **SEC. 3. ELECTRIC CONSUMER RIGHT TO ACCESS ELECTRIC**  
 13 **ENERGY INFORMATION.**

14          (a) IN GENERAL.—Title II of the Public Utility Reg-  
 15          ulatory Policies Act of 1978 (16 U.S.C. 824 et seq.) is  
 16          amended by adding at the end the following:

17 **“SEC. 215. ELECTRIC CONSUMER RIGHT TO ACCESS ELEC-**  
 18 **TRIC ENERGY INFORMATION.**

19          “(a) DEFINITIONS.—In this section:

20                 “(1) RETAIL ELECTRIC ENERGY INFORMA-  
 21                 TION.—The term ‘retail electric energy information’  
 22                 means—

23                         “(A) the electric energy consumption of an  
 24                         electric consumer over a defined time period;

1           “(B) the retail electric energy prices or  
2 rates applied to the electricity usage for the de-  
3 fined time period described in subparagraph (A)  
4 for the electric consumer;

5           “(C) the cost of usage by the consumer, in-  
6 cluding (if smart meter usage information is  
7 available) the estimated cost of usage since the  
8 last billing cycle of the consumer; and

9           “(D) in the case of nonresidential electric  
10 meters, any other electrical information that the  
11 meter is programmed to record (such as de-  
12 mand measured in kilowatts, voltage, frequency,  
13 current, and power factor).

14           “(2) SMART METER.—Except as provided in  
15 subsection (e), the term ‘smart meter’ means the de-  
16 vice used by an electric utility that—

17           “(A)(i) measures electric energy consump-  
18 tion by an electric consumer at the home or fa-  
19 cility of the electric consumer in intervals of 1  
20 hour or less; and

21           “(ii) is capable of sending electric energy  
22 usage information through a communications  
23 network to the electric utility; or

24           “(B) meets the guidelines issued under  
25 subsection (h).

1 “(b) CONSUMER RIGHTS.—

2 “(1) IN GENERAL.—Each electric consumer in  
3 the United States shall have the right to access (and  
4 to authorize 1 or more third parties to access) retail  
5 electric energy information of the electric consumer  
6 in—

7 “(A) an electronic form, free of charge, in  
8 conformity with nationally recognized open  
9 standards developed by a nationally recognized  
10 standards organization; and

11 “(B) a manner that is timely and conven-  
12 ient and provides adequate protections for the  
13 security of the information and the privacy of  
14 the electric consumer.

15 “(2) SMART METERS.—In the case of an elec-  
16 tric consumer that is served by a smart meter that  
17 can also communicate energy usage information to a  
18 device or network of an electric consumer or a device  
19 or network of a third party authorized by the con-  
20 sumer, the consumer shall, at a minimum, have the  
21 right to access (and to authorize 1 or more third  
22 parties to access) usage information in read-only for-  
23 mat directly from the smart meter.

24 “(3) PROVIDER OF INFORMATION.—The infor-  
25 mation required under this subsection shall be pro-

1 vided by the electric utility of the consumer or such  
2 other entity as may be designated by the applicable  
3 electric retail regulatory authority.

4 “(c) INFORMATION.—The right to access retail elec-  
5 tric energy information under subsection (b) includes, at  
6 a minimum—

7 “(1)(A) in the case of an electric consumer that  
8 is served by a smart meter, the right to access retail  
9 electric energy information—

10 “(i) in machine readable form, not more  
11 than 48 hours after consumption has occurred;  
12 or

13 “(ii) in accordance with the guidelines  
14 issued under subsection (h); or

15 “(B) in the case of an electric consumer that is  
16 not served by a smart meter, the right to access re-  
17 tail electric energy information in machine readable  
18 form as expeditiously after the time of receipt in a  
19 data center (including information provided by third  
20 party services) as is reasonably practicable and as  
21 prescribed by the applicable electric retail regulatory  
22 authority; and

23 “(2) except as otherwise provided in subsection  
24 (d)—

1           “(A) in the case of an electric consumer  
2           that is served by a smart meter, data at a gran-  
3           ularity that is—

4                   “(i) not less granular than the inter-  
5                   vals at which the data is recorded and  
6                   stored by the billing meter in use at the  
7                   premise of the electric consumer; or

8                   “(ii) in accordance with the guidelines  
9                   issued under subsection (h); and

10           “(B) in the case of an electric consumer  
11           that is not served by a smart meter, data at  
12           granularity equal to the data used for billing  
13           the electric consumer, or more precise granu-  
14           larity, as prescribed by the applicable electric  
15           retail regulatory authority.

16           “(d) ELECTRIC ENERGY INFORMATION RETEN-  
17 TION.—An electric consumer shall have the right to access  
18 the retail electric energy information of the consumer,  
19 through the website of the electric utility or other elec-  
20 tronic access authorized by the electric consumer, for a  
21 period of at least 13 months after the date on which the  
22 usage occurred, unless a different period is prescribed by  
23 the applicable electric retail regulatory authority.

24           “(e) DATA SECURITY.—Access described in sub-  
25 section (d) shall not interfere with or compromise the in-

1 tegrity, security, or privacy of the operations of a utility  
2 and the electric consumer, in accordance with the guide-  
3 lines issued by the Commission under subsection (h).

4       “(f) COST RECOVERY.—An electric utility providing  
5 retail electric energy information in accordance with other-  
6 wise applicable regulation of rates for the retail sale and  
7 delivery of electricity may recover in rates the cost of pro-  
8 viding the information, if the cost is determined reason-  
9 able and prudent by the applicable electric retail regu-  
10 latory authority.

11       “(g) ADDITIONAL AVAILABLE INFORMATION.—The  
12 right to access electric energy information shall extend to  
13 usage information generated by devices in or on the prop-  
14 erty of the consumer that is transmitted to the electric  
15 utility.

16       “(h) GUIDELINES FOR ELECTRIC CONSUMER AC-  
17 CESS.—

18               “(1) IN GENERAL.—Not later than 180 days  
19 after the date of enactment of this section, the Com-  
20 mission shall (after consultation with State and local  
21 regulatory authorities, including the National Asso-  
22 ciation of Regulatory Utility Commissioners, the  
23 Secretary of Energy, other appropriate Federal  
24 agencies, including the National Institute of Stand-  
25 ards and Technology, consumer advocacy groups,



1 utilities, and other appropriate entities, and after  
2 notice and opportunity for comment) issue guidelines  
3 that establish minimum national standards for im-  
4 plementation of the electric consumer right to access  
5 retail electric energy information under subsection  
6 (b).

7 “(2) STATE AND LOCAL REGULATORY AC-  
8 TION.—In issuing the guidelines, the Commission  
9 shall, to the maximum extent practicable, be guided  
10 by actions taken by State and local regulatory au-  
11 thorities to ensure electric consumer access to retail  
12 electric energy information, including actions taken  
13 after consideration of the standard under section  
14 111(d)(17).

15 “(3) CONTENT.—The guidelines shall provide  
16 guidance on issues necessary to carry out this sec-  
17 tion, including—

18 “(A) the timeliness and granularity of re-  
19 tail electric energy information;

20 “(B) appropriate nationally recognized  
21 open standards for data;

22 “(C) a definition of the term ‘smart me-  
23 ters’; and

1           “(D) protection of data security and elec-  
2           tric consumer privacy, including consumer con-  
3           sent requirements.

4           “(4) REVISIONS.—The Commission shall peri-  
5           odically review and, as necessary, revise the guide-  
6           lines to reflect changes in technology and the market  
7           for electric energy and services.

8           “(i) ENFORCEMENT.—

9           “(1) ENFORCEMENT BY STATE ATTORNEYS  
10          GENERAL.—If the attorney general of a State, or  
11          another official or agency of a State with competent  
12          authority under State law, has reason to believe that  
13          any electric utility that delivers electric energy at re-  
14          tail in the applicable State is not complying with the  
15          minimum standards established by the guidelines  
16          under subsection (h), the attorney general, official,  
17          or agency of the State, as *parens patriae*, may bring  
18          a civil action against the electric utility, on behalf of  
19          the electric consumers receiving retail service from  
20          the electric utility, in a district court of the United  
21          States of appropriate jurisdiction, to compel compli-  
22          ance with the standards.

23          “(2) SAFE HARBOR.—

24                 “(A) IN GENERAL.—No civil action may be  
25                 brought against an electric utility under para-

1 graph (1) if the Commission has, during the 2-  
2 year period ending on the date of the deter-  
3 mination, determined that the electric utility  
4 adopted policies, requirements, and measures,  
5 as necessary, that comply with the standards  
6 established by the guidelines under subsection  
7 (h).

8 “(B) PROCEDURES.—The Commission  
9 shall establish procedures to review the policies,  
10 requirements, and measures of electric utilities  
11 to assess, and issue determinations with regard  
12 to, compliance with the standards.

13 “(3) EFFECTIVE DATE.—This subsection takes  
14 effect on the date that is 2 years after the date the  
15 guidelines under subsection (h) are issued.”.

16 (b) CONFORMING AMENDMENT.—The table of con-  
17 tents for the Public Utility Regulatory Policies Act of  
18 1978 is amended by adding at the end of the items relat-  
19 ing to title II the following:

“Sec. 215. Electric consumer right to access electric energy information.”.

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