

118TH CONGRESS
1ST SESSION

S. _____

To promote competition in the area of digital energy management tools, enhance consumer access to electric energy and natural gas information, allow for the development and adoption of innovative products and services to help consumers, organizations, and governments manage their energy usage, reduce greenhouse gas emissions, and improve electric grid reliability, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. WELCH (for himself and Mr. VAN HOLLEN) introduced the following bill; which was read twice and referred to the Committee on

A BILL

To promote competition in the area of digital energy management tools, enhance consumer access to electric energy and natural gas information, allow for the development and adoption of innovative products and services to help consumers, organizations, and governments manage their energy usage, reduce greenhouse gas emissions, and improve electric grid reliability, 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,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Access to Consumer
3 Energy Information Act” or the “E-Access Act”.

4 **SEC. 2. DEFINITIONS.**

5 In this Act:

6 (1) **ELECTRIC CONSUMER.**—The term “electric
7 consumer” has the meaning given the term in sec-
8 tion 3 of the Public Utility Regulatory Policies Act
9 of 1978 (16 U.S.C. 2602).

10 (2) **ELECTRIC METER APP STORE.**—The term
11 “electric meter app store” means the meter of an
12 electric utility and any accompanying software that
13 allows the electric utility or electric consumers to
14 have software applications execute on the grid edge
15 computer in order to analyze or transmit retail elec-
16 tric energy information or grid edge consumer in-
17 sights.

18 (3) **ELECTRIC UTILITY.**—The term “electric
19 utility” has the meaning given the term in section
20 3 of the Public Utility Regulatory Policies Act of
21 1978 (16 U.S.C. 2602).

22 (4) **GAS CONSUMER.**—The term “gas con-
23 sumer” has the meaning given the term in section
24 302 of the Public Utility Regulatory Policies Act of
25 1978 (15 U.S.C. 3202).

1 (5) GAS UTILITY.—The term “gas utility” has
2 the meaning given the term in section 302 of the
3 Public Utility Regulatory Policies Act of 1978 (15
4 U.S.C. 3202).

5 (6) GRID EDGE COMPUTER.—The term “grid
6 edge computer” means a device, whether part of, or
7 separate from, a meter, that—

8 (A) measures power, voltage, current, or
9 other aspects of electric energy at or near the
10 premises of an electric consumer; and

11 (B) is capable of running 1 or more soft-
12 ware applications to analyze, in real time, any
13 measurement described in subparagraph (A) in
14 order to derive grid edge consumer insights or
15 information about the status or operation of the
16 electric grid.

17 (7) GRID EDGE CONSUMER INSIGHT.—The term
18 “grid edge consumer insight” means—

19 (A) the power, voltage, current, or other
20 aspects of electric energy measured and analyz-
21 able by a grid edge computer; and

22 (B) any calculation, estimate, or inference
23 from a grid edge computer that pertains to, or
24 reflects the characteristics of, the use of electric
25 energy by a particular electric consumer.

1 (8) METER.—The term “meter” means a device
2 that measures and records energy usage data at any
3 interval.

4 (9) RETAIL ELECTRIC ENERGY INFORMA-
5 TION.—The term “retail electric energy informa-
6 tion” means—

7 (A) the electric energy usage of an electric
8 consumer over a time interval, as measured and
9 recorded by the applicable meter;

10 (B) the retail electric energy prices and ap-
11 plicable rate applied to the electric energy usage
12 for the time interval described in subparagraph
13 (A) for the electric consumer;

14 (C) the costs of service provided to an elec-
15 tric consumer, as displayed on billing informa-
16 tion provided to that electric consumer at the
17 level of each line item;

18 (D) in the case of nonresidential electric
19 meters, any other electrical information that the
20 meter is programmed to record that is used for
21 billing purposes (such as demand measured in
22 kilowatts, voltage, frequency, current, and
23 power factor);

24 (E) grid edge consumer insights; and

1 (F) customer-specific information includ-
2 ing, at a minimum—

3 (i) customer name, mailing address,
4 premises address, contact information,
5 payment history, and account number; and

6 (ii) any information that may be nec-
7 essary for participation in, or to determine
8 customer eligibility for, bill payment assist-
9 ance, renewable energy, demand-side man-
10 agement, load management, or energy effi-
11 ciency programs.

12 (10) RETAIL NATURAL GAS INFORMATION.—

13 The term “retail natural gas information” means—

14 (A) the natural gas usage of a gas con-
15 sumer, as measured and recorded by the appli-
16 cable gas utility;

17 (B) the retail natural gas prices and appli-
18 cable rate applied to the natural gas usage de-
19 scribed in subparagraph (A) for the gas con-
20 sumer;

21 (C) the cost of service provided to a gas
22 consumer, as displayed on billing information
23 provided to that gas consumer at the level of
24 each line item;

1 (D) in the case of nonresidential natural
2 gas meters, any other information that the
3 meter is programmed to record that is used for
4 billing purposes; and

5 (E) customer-specific information includ-
6 ing, at a minimum—

7 (i) customer name, mailing address,
8 premises address, contact information,
9 payment history, and account number; and

10 (ii) any information that might be
11 necessary for participation in, or to deter-
12 mine customer eligibility for, bill payment
13 assistance, demand-side management, or
14 energy efficiency programs.

15 (11) SECRETARY.—The term “Secretary”
16 means the Secretary of Energy.

17 (12) STATE ENERGY OFFICE.—The term “State
18 energy office” means the office or agency of a State
19 responsible for developing the State energy conserva-
20 tion plan for the State under section 362 of the En-
21 ergy Policy and Conservation Act (42 U.S.C. 6322).

1 **SEC. 3. CONSUMER ACCESS TO ELECTRIC ENERGY AND**
2 **NATURAL GAS INFORMATION.**

3 (a) ELIGIBILITY FOR STATE ENERGY PLANS.—Sec-
4 tion 362(d) of the Energy Policy and Conservation Act
5 (42 U.S.C. 6322(d)) is amended—

6 (1) in paragraph (17), by striking “and” after
7 the semicolon at the end;

8 (2) by redesignating paragraph (18) as para-
9 graph (19); and

10 (3) by inserting after paragraph (17) the fol-
11 lowing:

12 “(18) programs to promote competition in the
13 area of digital energy management tools—

14 “(A) to enhance consumer access to, and
15 understanding of, electric energy and natural
16 gas usage and cost information, including, with
17 respect to each particular customer—

18 “(i) the residential and commercial re-
19 tail electric energy information (as defined
20 in section 2 of the E-Access Act) of that
21 customer; and

22 “(ii) the retail natural gas information
23 (as defined in that section) of that cus-
24 tomer;

25 “(B) to facilitate the development and
26 adoption of innovative products and services to

1 assist consumers in managing energy consump-
2 tion and expenditures; and

3 “(C) to increase the adoption of measured,
4 performance-based energy efficiency and de-
5 mand response programs, such as a program
6 described in section 50121 of Public Law 117-
7 169 (commonly known as the ‘Inflation Reduc-
8 tion Act of 2022’) (42 U.S.C. 18795); and”.

9 (b) GUIDELINES FOR ELECTRIC CONSUMER AND GAS
10 CONSUMER ACCESS.—

11 (1) IN GENERAL.—Not later than 180 days
12 after the date of enactment of this Act and subject
13 to paragraph (2), the Secretary shall issue guidelines
14 that establish model data sharing standards and
15 policies for States to provide electric consumers and
16 gas consumers, and third-party designees of those
17 electric consumers and gas consumers, with access
18 to retail electric energy information and retail nat-
19 ural gas information.

20 (2) CONSULTATION.—Before issuing guidelines
21 under paragraph (1), the Secretary shall—

22 (A) consult with—

23 (i) State and local regulatory authori-
24 ties;

- 1 (ii) other appropriate Federal agen-
2 cies, including the National Institute of
3 Standards and Technology and the Federal
4 Trade Commission;
- 5 (iii) consumer and privacy advocacy
6 groups;
- 7 (iv) electric utilities and gas utilities;
- 8 (v) the National Association of State
9 Energy Officials; and
- 10 (vi) other appropriate entities, includ-
11 ing groups representing public utility com-
12 missions, commercial and residential build-
13 ing owners, residential contractors, and
14 groups that represent demand response
15 and electricity data devices and services;
16 and
- 17 (B) provide notice and opportunity for
18 comment.

19 (3) STATE AND LOCAL REGULATORY ACTION.—
20 In issuing guidelines under paragraph (1), the Sec-
21 retary, to the maximum extent practicable, shall be
22 guided by actions taken by State and local regu-
23 latory authorities to ensure electric consumer and
24 gas consumer access to retail electric energy infor-
25 mation and retail natural gas information, including

1 actions taken after consideration of the standard es-
2 tablished under section 111(d)(19) of the Public
3 Utility Regulatory Policies Act of 1978 (16 U.S.C.
4 2621(d)(19)).

5 (4) CONTENTS.—In carrying out paragraph (1),
6 the Secretary shall include—

7 (A) guidelines specifying that retail electric
8 energy information and retail natural gas infor-
9 mation of an electric consumer or a gas con-
10 sumer should be made available to the electric
11 consumer or gas consumer (or a third-party
12 designee of the electric consumer or gas con-
13 sumer) by the electric utility or gas utility of
14 the electric consumer or gas consumer (or such
15 other entity as may be designated by the util-
16 ity), in consultation with, or with approval
17 from, as applicable, the applicable retail regu-
18 latory authority of the utility;

19 (B) guidelines regarding the timeliness and
20 specificity of retail electric energy information
21 and retail natural gas information to be made
22 available to an electric consumer or a gas con-
23 sumer (or a third-party designee of an electric
24 consumer or a gas consumer), including that
25 the retail electric energy information and retail

1 natural gas information should be made avail-
2 able—

3 (i) in an electronic machine-readable
4 form, without additional charge, in con-
5 formity with nationally recognized open
6 standards and best practices;

7 (ii) via a website or other electronic
8 access authorized by the electric consumer
9 or gas consumer, including at least 24
10 months of historical information;

11 (iii) in as close to real-time as is rea-
12 sonably practicable;

13 (iv) at the level of specificity that the
14 data are transmitted by the meter or grid
15 edge computer, to the extent reasonably
16 practicable; and

17 (v) in a manner that provides ade-
18 quate protections for the security of the in-
19 formation and the privacy of the electric
20 consumer or gas consumer, utilizing recog-
21 nized energy data privacy programs such
22 as the DataGuard Energy Data Privacy
23 Program of the Department of Energy or
24 other programs approved by the Secretary;

1 (C) guidelines regarding appropriate na-
2 tionally recognized open standards for data ex-
3 change;

4 (D) guidelines regarding consumer consent
5 requirements to ensure that an electric con-
6 sumer or gas consumer can conveniently and
7 securely authorize a third-party designee to ac-
8 cess the retail electric energy information or re-
9 tail natural gas information of that electric con-
10 sumer or gas consumer, including standardized
11 authorization language to which an electric con-
12 sumer or gas consumer will agree prior to the
13 electric consumer or gas consumer authorizing,
14 or the applicable electric utility or gas utility
15 sharing, retail electric energy information or re-
16 tail natural gas information of that electric con-
17 sumer or gas consumer;

18 (E) guidelines specifying that electric utili-
19 ties and gas utilities should, when a meter is
20 servicing an electric consumer or gas consumer,
21 communicate retail electric energy information
22 or retail natural gas information to the device
23 of the electric consumer or gas consumer or
24 through the network of an electric consumer or

1 gas consumer to a third-party designee of the
2 electric consumer or gas consumer;

3 (F) with respect to the terms and condi-
4 tions to be agreed to by a third-party designee
5 of an electric consumer or a gas consumer and
6 an electric utility or a gas utility for access to
7 the retail electric energy information or retail
8 natural gas information of that electric con-
9 sumer or gas consumer, guidelines specifying
10 that—

11 (i) those terms and conditions shall be
12 reasonable and nondiscriminatory;

13 (ii) those terms and conditions shall
14 not require anything of a third-party des-
15 ignee beyond requiring—

16 (I) the third-party designee to
17 provide to the electric utility or gas
18 utility—

19 (aa) the contact information
20 and Federal tax identification
21 number of the third-party des-
22 ignee; and

23 (bb) an acknowledgment of
24 compliance with a privacy re-
25 quirement, such as the

1 DataGuard Energy Data Privacy
2 Program of the Department of
3 Energy; and

4 (II) that the third-party designee
5 has not been disqualified by the appli-
6 cable retail regulatory authority of the
7 utility;

8 (iii) due process shall be afforded to
9 the third-party designee by the applicable
10 regulatory authority, including by giving
11 the third-party designee an opportunity to
12 rebut allegations of wrongdoing by that
13 third-party designee prior to any enforce-
14 ment action being taken by the applicable
15 regulatory authority;

16 (iv) the online authorization process
17 offered by the applicable gas utility or elec-
18 tric utility to the consumer shall be user-
19 friendly, and the personal information re-
20 quired to establish identity shall be con-
21 sistent with, and no more onerous than,
22 the standard practices of the applicable gas
23 utility or electric utility; and

24 (v) the third party may receive retail
25 electric energy information and retail nat-

1 ural gas information from an electric util-
2 ity or gas utility with consumer consent,
3 except if otherwise prohibited by Federal
4 law or by a finding of a State court or
5 other State adjudicatory body;

6 (G) guidelines specifying that electric utili-
7 ties and gas utilities shall provide certification
8 of adherence to the latest Green Button Con-
9 nect My Data standard by an independent body
10 on a periodic interval, as recommended by the
11 Secretary;

12 (H) guidelines specifying that Green But-
13 ton Connect My Data system availability shall
14 exceed 99-percent availability without severe er-
15 rors or defects;

16 (I) guidelines specifying that electric utili-
17 ties and gas utilities shall report on a publicly
18 available website the timeliness and perform-
19 ance of the processing of electronic data-sharing
20 authorizations and the timeliness of completing
21 third-party administrative and technical
22 onboarding with an electric utility or gas utility,
23 including recommendations from the Secretary
24 as to whether electric utilities and gas utilities,

1 or State or Federal agencies, should host such
2 publicly available websites;

3 (J) guidelines specifying that—

4 (i) electric meter app stores shall have
5 terms that are fair, reasonable, and non-
6 discriminatory to any user;

7 (ii) software developers and distrib-
8 uted energy resources that use electric
9 meter app stores or retail electric customer
10 information shall—

11 (I) have access to platform soft-
12 ware documentation; and

13 (II) be afforded due process
14 rights with regard to disputes con-
15 cerning functionality;

16 (iii) owners or operators of electric
17 meter app stores shall address fair com-
18 petition issues, including self-preferencing,
19 surveillance of competitive software appli-
20 cations, and undue use of default software
21 applications that have the effect of reduc-
22 ing consumer choices; and

23 (iv) electric meter app stores shall in-
24 clude metrics for applicable retail regu-

1 latory authorities to require of electric util-
2 ities, including, at a minimum—

3 (I) system availability;

4 (II) number and type of errors
5 and the severity of those errors; and

6 (III) time expended to conduct
7 technical software reviews; and

8 (K) guidelines addressing appropriate cir-
9 cumstances in which analysis of retail electric
10 energy information, retail natural gas informa-
11 tion, and estimates of energy saved as a result
12 of any efficiency measure may be released pub-
13 licly, without the consent of the consumer, only
14 by protection of individual consumer privacy via
15 mathematical methods such as differential pri-
16 vacy, or by alternative means at the discretion
17 of the Secretary, if required, that prevent re-
18 identification of the attributes of individual con-
19 sumers when publishing aggregate information.

20 (5) REVISIONS.—Every 3 years, the Secretary
21 shall review and, as necessary, revise the guidelines
22 issued under paragraph (1) to reflect changes in
23 technology, privacy needs, and the market for elec-
24 tric energy and natural gas and related services.

25 (c) VERIFICATION AND IMPLEMENTATION.—

1 (1) IN GENERAL.—A State energy office may
2 submit to the Secretary a description of the policies
3 of the State relating to electric consumer and gas
4 consumer access to retail electric energy information
5 and retail natural gas information for certification
6 by the Secretary that the policies meet the guidelines
7 issued under subsection (b).

8 (2) ASSISTANCE.—Subject to the availability of
9 amounts appropriated pursuant to paragraph (3),
10 the Secretary shall make amounts available to any
11 State that has policies described in paragraph (1)
12 that the Secretary certifies meet the guidelines
13 issued under subsection (b) to assist the State in im-
14 plementing programs described in paragraph (18) of
15 section 362(d) of the Energy Policy and Conserva-
16 tion Act (42 U.S.C. 6322(d)) (as amended by sub-
17 section (a)).

18 (3) AUTHORIZATION OF APPROPRIATIONS.—
19 There is authorized to be appropriated to carry out
20 this subsection \$10,000,000 for fiscal year 2023, to
21 remain available until expended.