

113TH CONGRESS
2D SESSION

S. 2002

To require the Secretary of Energy to conduct a motor and motor-driven systems market assessment and public awareness program, and for other purposes.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 6, 2014

Mr. PRYOR (for himself and Mr. ENZI) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To require the Secretary of Energy to conduct a motor and motor-driven systems market assessment and public awareness program, 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 “Motor Systems Market
5 Awareness Act of 2014”.

6 **SEC. 2. FINDINGS.**

7 Congress finds that—

1 (1) motors and motor-driven systems account
2 for a significant quantity of the electricity used in
3 the United States;

4 (2) motor electrical energy use is determined by
5 the efficiency of the motor and the design of the
6 motor-driven system in which the motor and the
7 drive operate;

8 (3) Federal Government research on commer-
9 cial and industrial motors and motor-driven system
10 use and efficiency is outdated;

11 (4) the Bureau of the Census has discontinued
12 collection of data on motor and generator importa-
13 tion, manufacture, shipment, and sales;

14 (5) the last Department of Energy motor mar-
15 ket assessment was conducted in 2002;

16 (6) motor and motor-driven systems have
17 changed dramatically during the 12-year period end-
18 ing on the date of enactment of this Act; and

19 (7) a new motor and motor-driven system mar-
20 ket assessment will help United States manufactur-
21 ers better understand the commercial marketplace
22 and become more globally competitive.

23 **SEC. 3. DEFINITIONS.**

24 In this Act:

1 (1) DEPARTMENT.—The term “Department”
2 means the Department of Energy.

3 (2) INTERESTED PARTIES.—The term “inter-
4 ested parties” includes—

5 (A) trade associations;

6 (B) motor manufacturers;

7 (C) manufacturers of variable speed drives,
8 including variable frequency drives;

9 (D) motor end users, including original
10 equipment manufacturers that use motors to
11 drive machinery;

12 (E) permanent magnetic material manu-
13 facturers;

14 (F) electric utilities; and

15 (G) individuals and entities that conduct
16 energy efficiency programs.

17 (3) SECRETARY.—The term “Secretary” means
18 the Secretary of Energy.

19 **SEC. 4. MOTOR MARKET ASSESSMENT.**

20 (a) IN GENERAL.—The Secretary, in consultation
21 with interested parties, shall conduct a market assessment
22 of motors and motor-driven systems used in the United
23 States.

24 (b) ASSESSMENT.—In conducting the assessment
25 under subsection (a), the Secretary shall—

1 (1) develop a detailed profile of the stock of mo-
2 tors and motor-driven systems in commercial and in-
3 dustrial facilities of the United States (as of the
4 date of enactment of this Act);

5 (2) develop a profile of commercial and indus-
6 trial motor and motor-driven system purchase and
7 maintenance practices;

8 (3) analyze the opportunities (by market seg-
9 ment) for improved energy efficiency and cost sav-
10 ings available through—

11 (A) the use of energy efficient motors,
12 variable speed drives, servo drives, and other
13 control technologies;

14 (B) optimization of motor-driven systems;
15 and

16 (C) substitution of existing motor designs
17 with new and future advanced motor and
18 motor-driven system designs, including—

19 (i) electronically commutated perma-
20 nent magnet motors;

21 (ii) interior permanent magnet mo-
22 tors;

23 (iii) switched reluctance motors;

24 (iv) synchronous reluctance motors;

25 and

1 (v) variable speed drives; and

2 (4) evaluate the state of the global supply chain
3 that supports motor and drive technologies (as of
4 the date of enactment of this Act), including—

5 (A) the accessibility and sustainability of
6 key materials;

7 (B) the progress of research and develop-
8 ment directed at decreasing the quantity of
9 heavy rare earth materials required in high en-
10 ergy density permanent magnets; and

11 (C) factors that may lead to an increase in
12 domestic manufacturing of motor and drive
13 technologies.

14 (c) REPORT.—Not later than 540 days after the date
15 of enactment of this Act, the Secretary shall publish and
16 make available on the website of the Department a report
17 on the assessment conducted under this section.

18 (d) RECOMMENDATIONS.—The Secretary shall use
19 the assessment and report required under this section—

20 (1) to develop recommendations to update the
21 detailed motor and motor-driven system profile on a
22 periodic basis using readily available market infor-
23 mation; and

1 (2) to identify technology and research needs
2 that could be met through joint industry and govern-
3 ment partnership.

4 **SEC. 5. PUBLIC AWARENESS PROGRAM.**

5 Not later than 2 years after the date of enactment
6 of this Act, the Secretary, in consultation with interested
7 parties, shall establish a program targeted at motor end-
8 users to increase the awareness of the end-users of—

9 (1) the energy efficiency and cost saving oppor-
10 tunities available to commercial and industrial facili-
11 ties from using higher efficiency motors and motor-
12 driven system technologies;

13 (2) motor and motor-driven system procure-
14 ment and management procedures; and

15 (3) criteria for making decisions for new, re-
16 placement, or repair of motor and motor-driven sys-
17 tem components.

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