

AMENDED IN ASSEMBLY MAY 15, 2014  
AMENDED IN ASSEMBLY MAY 12, 2014  
AMENDED IN ASSEMBLY APRIL 21, 2014  
AMENDED IN ASSEMBLY MARCH 28, 2014  
CALIFORNIA LEGISLATURE—2013–14 REGULAR SESSION

**ASSEMBLY BILL**

**No. 2529**

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**Introduced by Assembly Member Williams**

February 21, 2014

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An act to add Section 25327 to the Public Resources Code, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 2529, as amended, Williams. Energy: usage: plug-in equipment. Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission), on a biennial basis, to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery, and distribution. Existing law requires the Energy Commission, beginning November 1, 2003, and biennially thereafter, to adopt an integrated energy policy report containing an overview of major energy trends and issues facing the state.

Under existing law, the Public Utilities Commission has regulatory jurisdiction over the public utilities, including electrical corporations.

This bill would require the Energy Commission and the Public Utilities Commission, working jointly, to perform a baseline study, by January 1, 2017, of energy usage by plug-in equipment, as defined, during the year 2014, and to develop a coordinated implementation plan

to achieve by 2030 specified aggregate reductions in energy consumption by plug-in equipment from the 2014 baseline, with biennial intermediate targets. The bill would authorize the Energy Commission and the Public Utilities Commission to increase or decrease the aggregate reduction targets in energy consumption, if the Energy Commission and the Public Utilities Commission jointly determine, based on the baseline study, that those aggregate reduction targets are either unattainable or uneconomic for ratepayers, or are too conservative and would require a notice to be submitted to the Legislature, if those targets are increased or decreased due to unforeseen developments in plug-in equipment technology or the market for plug-in equipment. The bill would require the Energy Commission to report on the progress toward meeting the reduction targets and update the implementation plan as a part of the integrated energy policy report.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
 State-mandated local program: no.

*The people of the State of California do enact as follows:*

- 1 SECTION 1. (a) The Legislature finds and declares all of the
- 2 following:
- 3 (1) Energy efficiency programs and standards are essential tools
- 4 to help California conserve energy.
- 5 (2) Currently, the various types of plug-in equipment, such as
- 6 indoor and outdoor appliances, consumer and office electronics,
- 7 and power tools, are responsible for over 50 percent of residential
- 8 electricity consumption and 16 percent of commercial electricity
- 9 consumption in California and this electricity consumption is
- 10 projected to increase by 2030.
- 11 (3) California has set ambitious goals for energy efficiency in
- 12 buildings and lighting, but does not have quantified goals for a
- 13 category that represents the majority of residential electricity
- 14 consumption.
- 15 (4) Large and cost-effective energy savings opportunities remain
- 16 available in plug-in equipment. There is a need to supplement
- 17 appliance efficiency standards by expanding existing incentive
- 18 programs and developing other approaches including partnerships
- 19 with industry, research and development, and consumer education.
- 20 (5) Market barriers, such as a lack of consumer awareness and
- 21 information on product lifetime energy costs, and split incentives

1 between manufacturers who make the key design decisions and  
2 consumers who pay the electricity bill give efficiency programs a  
3 critical role in realizing the economic potential for energy  
4 efficiency in plug-in equipment.

5 (6) Challenges with the evaluation and the attribution of program  
6 savings to utilities and implementers, as well as the focus on  
7 short-term savings, are limiting the utilities' ability to achieve  
8 market transformation saving opportunities that take longer to  
9 implement and require upfront investment to yield large future  
10 savings.

11 (7) There are insufficient opportunities for the State Energy  
12 Resources Conservation and Development Commission and the  
13 Public Utilities Commission to integrate key industry expertise  
14 into program design and implementation.

15 (b) It is the intent of the Legislature to set a goal for plug-in  
16 equipment energy consumption to ensure both of the following:

17 (1) Energy savings opportunities in support of the state's energy  
18 and climate change goals are captured.

19 (2) The effective utilization of incentive programs, partnerships  
20 with industry, research and development, consumer education, and  
21 efficiency standards to meet the state's energy and climate goals.

22 SEC. 2. Section 25327 is added to the Public Resources Code,  
23 to read:

24 25327. (a) (1) For the purposes of this section, except as  
25 provided in paragraph (2), "plug-in equipment" means an electrical  
26 device that plugs into a ~~wall~~ power outlet, including, but not limited  
27 to, indoor appliances, such as kitchen and laundry appliances,  
28 portable, window-mounted, or through-the-wall HVAC equipment,  
29 commercial plug-in refrigeration, and security appliances; plug-in  
30 outdoor appliances; consumer and office electronics; personal care  
31 products; and power tools.

32 (2) "Plug-in equipment" does not include the following:

33 (A) ~~Servers-Equipment~~ at industrial-scale data centers located  
34 in buildings whose primary function is to be a data center.

35 (B) Non-plug-in heating, ventilation, and cooling equipment,  
36 including split, packaged, or built up HVAC equipment that is  
37 typically installed by an HVAC contractor.

38 (C) Built-in or portable lighting.

39 (D) Infrastructure loads connected directly to the building  
40 wiring, such as Ground Fault Circuit Interrupter (GFCI) breakers

1 and outlets, smoke or carbon monoxide detectors, dimming  
2 switches, and doorbells.

3 (E) Electric vehicles.

4 (F) Medical devices, as defined in subsection (h) of Section 321  
5 of Title 21 of the United States Code.

6 (3) For purposes of this subdivision, ~~wall~~ *power* outlets include  
7 line outlets, such as 110 Voltage Alternating Current (VAC) and  
8 other emerging delivery mechanisms, including Universal Serial  
9 Bus (USB), Power over Ethernet (PoE), and 24 volt direct current  
10 (V DC).

11 (4) For purposes of this subdivision “HVAC” means heating,  
12 ventilation, and air conditioning.

13 (b) The commission and the Public Utilities Commission,  
14 working jointly, shall do all of the following:

15 (1) On or before January 1, 2017, perform a baseline study of  
16 energy use by plug-in equipment in both the residential and  
17 commercial sectors of the state during the year 2014, in accordance  
18 with the following:

19 (A) The study shall identify the average *annual* energy  
20 consumption of individual product categories that account for 80  
21 percent of ~~total~~ *the total average annual energy consumption for*  
22 ~~plug-in-electricity consumption equipment~~ *in the residential sector*  
23 *and in the commercial sector.*

24 (B) The study shall include those products that the commission  
25 and the Public Utilities Commission elect to include, based on  
26 market and technology trends.

27 (C) When conducting the study, priority shall be given to the  
28 use of existing recent and relevant studies whenever possible,  
29 including those performed in other states, instead of performing  
30 new field studies.

31 (2) Develop a coordinated implementation plan, in consultation  
32 with stakeholders, *including equipment manufacturers, equipment*  
33 *retailers, and electric utilities*, to achieve by 2030 at least a  
34 25-percent aggregate reduction in energy consumption per  
35 residential household, and a 40-percent aggregate reduction in  
36 energy consumption per square foot of commercial space, by  
37 plug-in equipment in the state from the 2014 baseline determined  
38 pursuant to paragraph (1), with biennial intermediate targets  
39 between 2018 to 2030, except as provided in subdivision (c). The

1 coordinated implementation plan shall meet all of the following  
2 requirements:

3 (A) Be comprised of a complementary portfolio of techniques,  
4 applications, and practices that may include, but need not be limited  
5 to, incentive programs, rebate programs, appliance early  
6 replacement rebate programs that link purchase and disposal  
7 rebates, upstream market transformation programs, voluntary  
8 initiatives and partnerships with industry to promote innovation,  
9 expanded research and development, public outreach and education  
10 efforts, and efficiency standards.

11 (B) Consider costs and ratepayer protections, consistent with  
12 Section 25000.1.

13 (C) Use an accurate cost-effectiveness methodology for  
14 assessing the long-term value of efficiency savings and ensure that  
15 benefits outweigh costs to ratepayers.

16 (3) Work with stakeholders to address challenges that may limit  
17 or inhibit the achievement of the reduction targets set forth in  
18 paragraph (2), including, but not limited to, the evaluation and  
19 attribution of energy savings, and the enablement of market  
20 transformation programs.

21 (4) Track the implementation of the plan in meeting the  
22 reduction targets annually through the Electricity Supply Analysis  
23 Division of the commission and the Energy Division of the Public  
24 Utilities Commission.

25 (5) Revise the implementation plan and priorities in consultation  
26 with stakeholders.

27 (c) (1) The commission and the Public Utilities Commission  
28 may increase or decrease the aggregate reduction targets for energy  
29 consumption specified in paragraph (2) of subdivision (b), if the  
30 commission and the Public Utilities Commission jointly determine,  
31 based on the baseline energy use study conducted pursuant to  
32 paragraph (1) of subdivision ~~(a)~~; (b), that those aggregate reduction  
33 targets for energy consumption are either unattainable or  
34 uneconomic for ratepayers, or are too conservative.

35 (2) If, as a result of unforeseen developments in plug-in  
36 equipment technology or the market for plug-in equipment, the  
37 commission and the Public Utilities Commission take action  
38 pursuant to paragraph (1), the commission and the Public Utilities  
39 Commission shall submit a notice to the Legislature, in accordance

1 with Section 9795 of the Government Code, describing that action,  
2 including the basis for that action.

3 (d) The commission shall report on the progress toward meeting  
4 the reduction targets through the tracking pursuant to paragraph  
5 (4) of subdivision (b) and update the implementation plan, as a  
6 part of the integrated energy policy report required pursuant to  
7 Section 25302.

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