AMENDED IN ASSEMBLY APRIL 6, 2015

CALIFORNIA LEGISLATURE—2015–16 REGULAR SESSION

ASSEMBLY BILL No. 1094

Introduced by Assembly Member Williams
(Coauthors: Senators Pavley and Wolk)

February 27, 2015

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

LEGISLATIVE COUNSEL'S DIGEST

AB 1094, 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, in collaboration with the Public Utilities Commission, to conduct an analysis of plug-in equipment electricity consumption, as specified, and set statewide targets for the greenhouse gases emitted by the generation of the electricity consumed by plug-in equipment. The bill would require the Energy Commission, in collaboration with the Public Utilities Commission, to develop, track the progress of, revise, and update an implementation plan to ~~achieve, and work with stakeholders to address challenges to~~

~~the achievement of,~~ *achieve* those statewide targets, as specified. *The bill would require the Public Utilities Commission, in collaboration with the Energy Commission, to work with stakeholders to address challenges to the achievement of those statewide targets.*

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

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

SECTION 1. (a) The Legislature finds and declares all of the following:

(1) Residential and commercial buildings and the systems and equipment within them were responsible for 69 percent of all electricity consumption in California in 2013, the equivalent output of 70 500-megawatt powerplants. Under the ~~2000–2013~~ *2000–13* historical growth trends, this is projected to increase to the equivalent of 79 powerplants by 2030. The electric power sector is the second largest source of greenhouse gas emissions in California after transportation, comprising 21 percent of the state's total emissions.

(2) Plug-in equipment is responsible for ~~the majority~~ *two-thirds* of electricity consumption in residential ~~buildings, a large portion of which is~~ *buildings and a significant share of electricity consumption* in office buildings. This electricity consumption is increasing rapidly, indicating that current plug-in equipment efficiency policy efforts are outpaced by the growth in the number of electronic devices and their electricity consumption, jeopardizing California's ability to meet its energy and climate goals.

(3) Cost-effective technologies such as those used in mobile electronic devices already exist to significantly reduce the electricity consumption of plug-in equipment, but are not used in the majority of plug-in electronic devices.

(4) California has set ambitious goals for renewable energy and energy efficiency in the envelope, major systems, and lighting of buildings, but does not have quantified goals for a category that now represents ~~the majority~~ *two-thirds* of the electricity consumption in the state's residential buildings and a significant share of the electricity consumption in commercial buildings.

(5) Market barriers, such as a lack of consumer awareness and information on product lifetime energy costs, and split incentives

between manufacturers who make product design decisions and consumers who pay the electricity bill, give efficiency programs and standards a critical role in realizing the economic potential for energy efficiency in plug-in equipment.

(6) Challenges with the evaluation and the attribution of program savings to utilities and program implementers, as well as the focus on short-term savings, are limiting the effective use of these programs to capture energy-saving opportunities that require upfront investment to yield large future savings through market transformation.

(7) The State Energy Resources Conservation and Development Commission and the Public Utilities Commission have set a goal to achieve zero net energy for all new residential buildings by 2020 and for all new, and a substantial proportion of existing, commercial buildings by 2030.

(8) The Legislature supports the zero net energy goals of the State Energy Resources Conservation and Development Commission and the Public Utilities Commission as a key strategy to decarbonize the California economy.

(9) Plug-in equipment electricity consumption may not be fully accounted for in zero net energy models, leading to buildings designed and certified as zero net energy not necessarily achieving zero net energy in real-world operation when occupants bring in typical plug-in equipment.

(b) It is the intent of the Legislature to ensure that, in support of the state's climate and energy goals, plug-in equipment energy consumption is reduced where technologically feasible and cost effective.

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

25327. (a) (1) For purposes of this subdivision "HVAC" means heating, ventilation, and air conditioning.

(2) For the purposes of this section, except as provided in paragraph (3), "plug-in equipment" means an electrical device that plugs into a power outlet, including, but not limited to, household appliances, electronic products, miscellaneous electrical loads, portable and other plug-in HVAC equipment, and commercial plug-in appliances.

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

(A) Non-plug-in HVAC, including split, packaged, or built-up HVAC equipment that is typically installed by an HVAC contractor.

(B) Lighting, whether built in or portable.

(C) Infrastructure loads wired directly to the building electrical system, such as ground-fault circuit interrupter (GFCI) breakers and outlets, wired smoke or carbon monoxide detectors, and lighting switches.

(D) Electric vehicles.

(4) For purposes of this subdivision, power outlets include line outlets, such as 110-volt alternating current (AC) and other emerging power delivery mechanisms, including Universal Serial Bus (USB), Power over Ethernet (PoE), and 24-volt direct current (VDC).

(b) The commission shall, in collaboration with the Public Utilities Commission, do all of the following:

(1) Conduct an analysis of plug-in equipment electricity consumption, including appliances, electronics, and miscellaneous electric loads, to assess current use and trends. The commission shall draw on existing studies and data where appropriate to limit costs and reduce the time required to complete the analysis. *The analysis shall focus on the top 80 percent of plug-in equipment average annual electricity consumption.*

(2) Before January 1, 2018, set statewide targets for the greenhouse gases emitted by the generation of the electricity consumed by plug-in equipment, in support of Executive Order S-3-05 to reduce greenhouse gases to 80 percent below 1990 levels by 2050. The commission may also set intermediate 2030 and 2040 targets.

(3) Develop an implementation plan, in consultation with stakeholders, including equipment manufacturers and retailers, to achieve the targets set forth in paragraph (2). The implementation plan shall meet all of the following requirements:

(A) Be comprised of a complementary portfolio of techniques, applications, and practices that may include, but need not be limited to: revising existing, and setting new, appliance efficiency standards; working with federal government agencies to revise existing, and implement new, federal standards; implementing incentive programs, appliance early replacement rebate programs that link purchase and disposal rebates, and upstream market

transformation programs; expanding research and development; and public outreach and education efforts.

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

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

~~(4) Work with stakeholders to address challenges that may limit or inhibit the achievement of the reduction targets set forth in paragraph (2), including, but not limited to, the evaluation and attribution of energy savings and the enabling of market transformation programs.~~

~~(5)~~

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

~~(6)~~

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

~~(7)~~

(6) Update the implementation plan, as a part of the integrated energy policy report required pursuant to Section 25302, with a report on the progress toward meeting the reduction targets through the tracking required pursuant to paragraph ~~(5).~~ *(4)*.

(c) The Public Utilities Commission shall, in collaboration with the commission, work with stakeholders, including equipment manufacturers, equipment retailers, and electric utilities, to address challenges that may limit or inhibit the achievement of the reduction targets set forth in paragraph (2) of subdivision (b), including, but not limited to, the evaluation and attribution of energy savings and the enabling of market transformation programs.

O