

1 *Requested by Sen. Bray*

2 TO THE HONORABLE SENATE:

3 The Committee on Natural Resources and Energy to which was referred  
4 House Bill No. 410 entitled “An act relating to adding products to Vermont’s  
5 energy efficiency standards for appliances and equipment” respectfully reports  
6 that it has considered the same and recommends that the Senate propose to the  
7 House that the bill be amended by striking out all after the enacting clause and  
8 inserting in lieu thereof the following:

9 \* \* \* Appliance Efficiency \* \* \*

10 Sec. 1. PURPOSE

11 (a) In 9 V.S.A. § 2792, the General Assembly found that efficiency  
12 standards for products sold or installed in the State provide benefits to  
13 consumers and businesses, including saving money on utility bills, saving  
14 energy and thereby reducing the environmental impacts of energy  
15 consumption, reducing or delaying the need for new power plants and  
16 upgrades to the electric transmission and distribution system, and allowing the  
17 energy cost savings to be spent on other goods and services within the State’s  
18 economy.

19 (b) The purpose of this act is to obtain the benefits found in 9 V.S.A.  
20 § 2792 for the following products to which the State’s efficiency standards  
21 under 9 V.S.A. chapter 74 do not currently apply: air compressors,

1 commercial dishwashers, commercial fryers, commercial hot-food holding  
2 cabinets, commercial steam cookers, computers and computer monitors,  
3 faucets, high color rendering index fluorescent lamps, portable air  
4 conditioners, portable electric spas, residential ventilating fans, showerheads,  
5 spray sprinkler bodies, ~~telephones~~, uninterruptible power supplies, urinals,  
6 ~~water closets~~, and water coolers.

7 Sec. 2. 9 V.S.A. § 2793 is amended to read:

8 § 2793. DEFINITIONS

9 As used in this chapter:

10 \* \* \*

11 (16) With respect to air compressors, the following definitions apply:

12 (A) “Air compressor” means a compressor that is designed to  
13 compress air that has an inlet open to the atmosphere or other source of air and  
14 that consists of the bare compressor, also known as the compression element;  
15 one or more drivers; mechanical equipment to drive the compression element;  
16 and any ancillary equipment.

17 (B) “Compressor” means a machine or apparatus that converts  
18 different types of energy into the potential energy of gas pressure for  
19 displacement and compression of gaseous media to any higher-pressure values  
20 above atmospheric pressure and has a pressure ratio at full-load operating  
21 pressure greater than 1.3.

1           (17) “Commercial dishwasher” means a machine designed to clean and  
2           sanitize plates, pots, pans, glasses, cups, bowls, utensils, and trays by applying  
3           sprays of detergent solution, with or without blasting media granules, and a  
4           sanitizing rinse. The phrase “commercial dishwasher” does not include  
5           dishwashers intended for consumer use as defined in 10 C.F.R. § 430.2.

6           (18) “Commercial fryer” means an appliance, including a cooking  
7           vessel, in which oil is placed to such a depth that the cooking food is supported  
8           by displacement of the cooking fluid rather than by the bottom of the vessel.  
9           Heat is delivered to the cooking fluid by means of an immersed electric  
10           element of band-wrapped vessel or by heat transfer from gas burners either  
11           through the walls of the fryer or through tubes passing through the cooking  
12           fluid.

13           (19) “Commercial hot-food holding cabinet” means a heated, fully  
14           enclosed compartment with one or more solid or transparent doors designed to  
15           maintain the temperature of hot food that has been cooked using a separate  
16           appliance. The phrase “commercial hot-food holding cabinet” does not include  
17           heated glass merchandizing cabinets, drawer warmers, or cook-and-hold  
18           appliances.

19           (20) “Commercial steam cooker” means a device with one or more  
20           food-steaming compartments in which the energy in the steam is transferred to

1 the food by direct contact. A commercial steam cooker may also be known as  
2 a compartment steamer.

3 (21) “Computer” means a device that performs logical operations  
4 and processes data, whether or not input devices or displays are included  
5 when the device is shipped.

6 (A) At a minimum, a computer includes:

7 (i) a central processing unit (CPU) to perform operations or, if  
8 no CPU is present, then the device functions as a client gateway to a  
9 server, and the server acts as a computational CPU;

10 (ii) the ability to support user input devices such as a  
11 keyboard, mouse, or touch pad; and

12 (iii) an integrated display screen or the ability to support an  
13 external display screen to output information.

14 (B) The term “computer” includes both stationary and portable  
15 units and includes a desktop computer, a portable all-in-one, a notebook  
16 computer, a mobile gaming system, a high-expandability computer, a  
17 small-scale server, a thin client, and a workstation.

18 (C) The term “computer” does not include a tablet, a game  
19 console, a television, a device with an integrated and primary display that  
20 has a screen size of 20 square inches or less, a server other than a small-  
21 scale server, or an industrial computer.

1           ~~(22) “Computer monitor” means an analog or digital device~~  
2           ~~composed of a display screen and associated electronics that has a~~  
3           ~~diagonal screen size greater than or equal to 17 inches and less than or~~  
4           ~~equal to 61 inches, that has a pixel density of greater than 5,000 pixels per~~  
5           ~~square inch (psi), and that is designed primarily for the display of~~  
6           ~~computer-generated signals for viewing by one person in a desk-based~~  
7           ~~environment. The term “computer monitor” does not include:~~

8                     ~~(A) displays with integrated or replaceable batteries designed to~~  
9                     ~~support primary operation without AC mains or external DC power, such~~  
10                    ~~as electronic readers, mobile phones, tablets, battery-powered digital~~  
11                    ~~picture frames; or~~

12                    ~~(B) a television or signage display.~~

13           ~~(23) “ENERGY STAR Program” means the federal program initiated by~~  
14           ~~the U.S. Environmental Protection Agency pursuant to 42 U.S.C. § 7403(g)~~  
15           ~~that includes certification of energy-saving products, buildings, and tools, and~~  
16           ~~includes other resources for saving energy.~~

17           ~~(22) With respect to faucets and showerheads, the following definitions~~  
18           ~~apply:~~

19                     ~~(A) “Faucet” means a lavatory faucet, kitchen faucet, metering~~  
20                     ~~faucet, public lavatory faucet, or replacement aerator for a lavatory, public~~  
21                     ~~lavatory, or kitchen faucet. As used in this subdivision (24)(A):~~

1                    (i) “Metering faucet” means a fitting that, when turned on, will  
2                    gradually shut itself off over a period of several seconds.

3                    (ii) “Public lavatory faucet” means a fitting intended to be  
4                    installed in nonresidential bathrooms that are exposed to walk-in traffic.

5                    (iii) “Replacement aerator” means an aerator sold as a  
6                    replacement, separate from the faucet to which it is intended to be attached.

7                    (B) “Showerhead” means an accessory to a supply fitting for  
8                    spraying water onto a bather, typically from an overhead position. The term  
9                    includes a body spray and handheld shower. As used in this subdivision

10                   **(22)(B):**

11                   (i) “Body spray” means a shower device for spraying water onto a  
12                   bather other than from the overhead position.

13                   (ii) “Handheld shower” means a showerhead that can be held or  
14                   fixed in place for the purpose of spraying water onto a bather and that is  
15                   connected to a flexible hose.

16                   (23) “High color rendering index (CRI) fluorescent lamp” means a  
17                   fluorescent lamp with a color rendering index of 87 or greater that is not a  
18                   compact fluorescent lamp.

19                   **(24) “Luminaire” means a complete lighting unit consisting of a**  
20                   **fluorescent lamp or lamps, together with parts designed to distribute the**

1 **light, to position and protect such lamps, and to connect such lamps to the**  
2 **power supply through the ballast.**

3 (25) “Portable electric spa” means a factory-built electric spa or hot tub,  
4 which may or may not include any combination of integral controls, water  
5 heating, or water circulating equipment.

6 (26) With respect to portable air conditioners, the following definitions  
7 apply:

8 (A) “Portable air conditioner” means a portable encased assembly,  
9 other than a packaged terminal air conditioner, room air conditioner, or  
10 dehumidifier, that includes a source of refrigeration; delivers cooled,  
11 conditioned air to an enclosed space; and is powered by single-phase electric  
12 current. The assembly may include additional means for air circulation and  
13 heating and may be a single-duct or a dual-duct portable air conditioner.

14 (B) “Single-duct portable air conditioner” means a portable air  
15 conditioner that draws all of the condenser inlet air from the conditioned space  
16 without the means of a duct and discharges the condenser outlet air outside the  
17 conditioned space through a single duct attached to an adjustable window  
18 bracket.

19 (C) “Dual-duct portable air conditioner” means a portable air  
20 conditioner that draws some or all of the condenser inlet air from outside the  
21 conditioned space through a duct attached to an adjustable window bracket,

1 may draw additional condenser inlet air from the conditioned space, and  
2 discharges the condenser outlet air outside the conditioned space by means of a  
3 separate duct attached to an adjustable window bracket.

4 (27) “Residential ventilating fan” means a ceiling, wall-mounted, or  
5 remotely mounted in-line fan designed to be used in a bathroom or utility  
6 room, ~~or a kitchen range hood,~~ whose purpose is to move air from inside the  
7 building to the outdoors.

8 (28) With respect to spray sprinkler bodies, the following definitions  
9 apply:

10 (A) “Pressure regulator” means a device that maintains constant  
11 operating pressure immediately downstream from the device, given higher  
12 pressure upstream.

13 (B) “Spray sprinkler body” means the exterior case or shell of a  
14 sprinkler incorporating a means of connection to the piping system designed to  
15 convey water to a nozzle or orifice.

16 ~~(30) “Telephone” means an electronic product whose primary~~  
17 ~~purpose is to transmit and receive sound over a distance using a voice or~~  
18 ~~data network. The term does not include a cellular telephone as defined in~~  
19 ~~the “ENERGY STAR Program Product Specification for Telephony,”~~  
20 ~~Version 3.0.~~

1           **(29) “T12 fluorescent lamp” means a tubular fluorescent lamp to**  
2           **which one of the following applies:**

3                   **(A) The lamp has a nominal rating of 34 watts, is 48 inches in**  
4                   **length and one and one-half inches in diameter, and conforms to ANSI**  
5                   **standard C78.81-2003 (Data Sheet 7881-ANSI-1006-1). Such a lamp is**  
6                   **often referred to as an “F34T12 lamp” or an “F40T12/ES lamp.”**

7                   **(B) The lamp has a nominal rating of 40 watts, is 48 inches in**  
8                   **length and one and one-half inches in diameter, and conforms to ANSI**  
9                   **standard C78.81-2003 (Data Sheet 7881-ANSI-1010-1). Such a lamp is**  
10                  **often referred tas an “F40T12 lamp.”**

11                  **(C) The lamp has a nominal rating of 60 watts, is 96 inches in**  
12                  **length and one and one-half inches in diameter, and conforms to ANSI**  
13                  **standard C78.81-2003 (Data Sheet 7881-ANSI-3006-1). Such a lamp is**  
14                  **often referred to an “F96T12/ES lamp.”**

15                  **(D) The lamp has a nominal rating of 75 watts, is 96 inches in**  
16                  **length and one and one-half inches in diameter, and conforms to ANSI**  
17                  **standard C78.81-2003 (Data Sheet 7881-ANSI-3007-1). Such a lamp is**  
18                  **often referred to as an “F96T12 lamp.”**

19                  **(E) The lamp has a nominal rating of 95 watts, is 96 inches in**  
20                  **length and one and one-half inches in diameter, and conforms to ANSI**

1 standard C78.81-2003 (Data Sheet 7881-ANSI-1017-1). Such a lamp is  
2 often referred to as an “F96T12HO/ES lamp.”

3 (F) The lamp has a nominal rating of 110 watts, is 96 inches in  
4 length and one and one-half inches in diameter, and conforms to ANSI  
5 standard C78.81-2003 (Data Sheet 7881-ANSI-1019-1). Such a lamp is  
6 often referred to as an “F96T12HO lamp.”

7 (30) “Uninterruptible power supply” means a battery charger consisting  
8 of a combination of convertors, switches, and energy storage devices, such as  
9 batteries, constituting a power system that maintains continuity of load power  
10 in case of input power failure.

11 (31) With respect to urinals ~~and water closets~~, the following definitions  
12 apply:

13 (A) ~~“Dual-flush effective flush volume” means the average flush~~  
14 ~~volume of two reduced flushes and one full flush.~~

15 (B) ~~“Dual-flush water closet” means a water closet incorporating~~  
16 ~~a feature that allows the user to flush the water closet with either a~~  
17 ~~reduced or a full volume of water.~~

18 (C) ~~“Plumbing fixture” means an exchangeable device that connects~~  
19 ~~to a plumbing system to deliver and drain away water and waste.~~

20 (B) ~~“Urinal” means a plumbing fixture that receives only liquid body~~  
21 ~~waste and conveys the waste through a trap into a drainage system.~~

1           ~~(E) “Water closet” means a plumbing fixture having a water-~~  
2           ~~containing receptor that receives liquid and solid body waste through an~~  
3           ~~exposed, integral trap into a drainage system.~~

4           (C) “Trough-type urinal” means a urinal designed for simultaneous  
5           use by two or more persons.

6           (32) With respect to water coolers, the following definitions apply:

7           (A) “Cold-only unit” means a water cooler that dispenses cold  
8           water only.

9           (B) “Cook and cold unit” means a water cooler that dispenses both  
10           cold and room-temperature water.

11           (C) “Hot and cold unit” means a water cooler that dispenses both hot  
12           and cold water. A hot and cold unit also may dispense room-temperature  
13           water.

14           (D) “On demand” means that a water cooler heats water as it is  
15           requested, which typically takes a few minutes to deliver.

16           (E) “Storage-type” means that a water cooler stores thermally  
17           conditioned water in a tank and the conditioned water is available  
18           instantaneously. Storage-type water coolers include point-of-use, dry storage  
19           compartment, and bottled water coolers.

20           (F) “Water cooler” means a freestanding device that consumes  
21           energy to cool or heat potable water, or both.

1       Sec. 3. 9 V.S.A. § 2794 is amended to read:

2       § 2794. SCOPE

3           (a) The provisions of this chapter apply to the following types of new  
4 products sold, offered for sale, or installed in the State:

5           (1) Medium voltage dry-type distribution transformers.

6           (2) Metal halide lamp fixtures.

7           (3) Residential furnaces and residential boilers.

8           (4) Single-voltage external AC to DC power supplies.

9           (5) State-regulated incandescent reflector lamps.

10          (6) General service lamps.

11          (7) Air compressors.

12          (8) Commercial dishwashers.

13          (9) Commercial fryers.

14          (10) Commercial hot-food holding cabinets.

15          (11) Commercial steam cookers.

16          (12) Computers and computer monitors.

17          (13) Faucets.

18          (14) High CRI fluorescent lamps.

19          (15) Portable air conditioners.

20          (16) Portable electric spas.

21          (17) Residential ventilating fans.

1           (18) Showerheads.

2           (19) Spray sprinkler bodies.

3           (20) **Telephones.**

4           ~~(21)~~ Uninterruptible power supplies.

5           (21) Urinals.

6           ~~(23)~~ **Water closets.**

7           (22) Water coolers.

8           (23) Each other product for which the Commissioner is required to  
9 adopt an efficiency or water conservation standard by rule pursuant to  
10 section 2795 of this title.

11           ~~(8)~~(24) Any other product that may be designated by the Commissioner  
12 in accordance with section 2797 of this title.

13           (b) The provisions of this chapter do not apply to:

14           (1) New products manufactured in the State and sold outside the State  
15 and the equipment used in manufacturing those products.

16           (2) New products manufactured outside the State and sold at wholesale  
17 inside the State for final retail sale and installation outside the State.

18           (3) Products installed in mobile manufactured homes at the time of  
19 construction.

20           (4) Products designed expressly for installation and use in recreational  
21 vehicles.

1 Sec. 4. 9 V.S.A. § 2795 is amended to read:

2 § 2795. EFFICIENCY AND WATER CONSERVATION STANDARDS

3 (a) The Commissioner shall adopt rules in accordance with the provisions  
4 of 3 V.S.A. chapter 25 establishing minimum efficiency standards for the types  
5 of new products set forth in section 2794 of this title. The rules shall provide  
6 for the following minimum efficiency standards for products sold or installed  
7 in this State:

8 \* \* \*

9 (4)(A) Single-voltage external AC to DC power supplies shall meet the  
10 energy efficiency requirements of the following table:

11 \* \* \*

12 (C) For purposes of this subdivision (4), the efficiency of single-  
13 voltage external AC to DC power supplies shall be measured in accordance  
14 with the test methodology specified by the ~~U.S. Environmental Protection~~  
15 ~~Agency's Energy Star~~ ENERGY STAR Program, "Test Method for  
16 Calculating the Energy Efficiency of Single-Voltage External AC-DC and AC-  
17 AC Power Supplies (August 11, 2004)."

18 \* \* \*

19 (6) In the rules, the Commissioner shall adopt minimum efficiency and  
20 water conservation standards for each product that is subject to a standard  
21 under 10 C.F.R. §§ 430 and 431 as those provisions existed on January 19,

1 2017. The minimum standard and the testing protocol for each product shall  
2 be the same as adopted in those sections of the Code of Federal Regulations,  
3 except that for faucets, showerheads, and urinals, and water closets, the  
4 minimum standard and testing protocol shall be as otherwise set forth in this  
5 section.

6 (7) In the rules, the Commissioner shall adopt a minimum efficacy  
7 standard for general service lamps of 45 lumens per watt, when tested in  
8 accordance with 10 C.F.R. § 430.23(gg) as that provision existed on  
9 January 19, 2017.

10 (8) In this subdivision (8), “final rule” means the document setting forth  
11 a final action by the U.S. Department of Energy (DOE) with respect to a final  
12 rule for “Energy Conservation Standards for Air Compressors,” docket no.  
13 EERE-2013-BT-STD-0040, approved by DOE on December 5, 2016. Air  
14 compressors that meet the 12 criteria to be codified under 10 C.F.R.  
15 § 431.345(a) and set forth on pages 350 to 351 of the final rule shall meet the  
16 requirements contained in Table 1 on page 352 of the final rule using the  
17 instructions to be codified under 10 C.F.R. § 431.345(b) and set forth on page  
18 353 of the final rule. Compliance with these requirements shall be measured in  
19 accordance with 10 C.F.R. Part 431, Subpart T, Appendix A, entitled “Uniform  
20 Test Method for Certain Air Compressors,” as in effect on July 3, 2017.

1           (9) Commercial dishwashers included in the scope of the “ENERGY  
2           STAR Program Requirements Product Specification for Commercial  
3           Dishwashers,” Version 2.0, shall meet the qualification criteria of that  
4           specification.

5           (10) Commercial fryers included in the scope of the “ENERGY STAR  
6           Program Requirements Product Specification for Commercial Fryers,” Version  
7           2.0, shall meet the qualification criteria of that specification.

8           (11) Commercial hot-food holding cabinets shall have a maximum idle  
9           energy rate of 40 watts per cubic foot of interior volume, as determined by the  
10           “idle energy rate-dry test” in ASTM F2140-11, “Standard Test Method for  
11           Performance of Hot-Food Holding Cabinets,” ASTM International (2011).  
12           Interior volume shall be measured as prescribed in the “ENERGY STAR  
13           Program Requirements Product Specification for Commercial Hot-Food  
14           Holding Cabinets,” Version 2.0.

15           (12) Commercial steam cookers shall meet the requirements of the  
16           “ENERGY STAR Program Requirements Product Specification for  
17           Commercial Steam Cookers,” Version 1.2.

18           (13) Computers and computer monitors shall meet the requirements of  
19           20 California Code of Regulations (C.C.R.) § 1605.3(v) and compliance with  
20           these requirements shall be measured in accordance with test methods  
21           prescribed in 20 C.C.R. § 1604(v).

1           **(A) For the purposes of this subdivision (13), terms used in the**  
2           **referenced portions of the C.C.R. shall be as defined in 20 C.C.R. § 1602.**

3           **(B) The rules shall define “computer” and “computer monitor”**  
4           **to have the same meaning as set forth in 20 C.C.R. § 1602(v).**

5           **(C) The referenced portions of the C.C.R. shall be those adopted on**  
6           **or before the effective date of this section. However, the Commissioner shall**  
7           **have authority to amend the rules so that the definitions of “computer”**  
8           **and “computer monitor” and the minimum efficiency standards for**  
9           **computers and computer monitors conform to subsequently adopted**  
10           **modifications to the referenced sections of the C.C.R.**

11           **(14) Faucets, except for metering faucets, and showerheads shall meet**  
12           **the standards set forth in this subdivision (14) when tested in accordance with**  
13           **10 C.F.R. Part 430, Subpart B, Appendix S, entitled “Uniform Test Method for**  
14           **Measuring the Water Consumption of Faucets and Showerheads,” as in effect**  
15           **on January 3, 2017.**

16           **(A) Lavatory faucets and replacement aerators shall not exceed a**  
17           **maximum flow rate of 1.5 gallons per minute (gpm) at 60 pounds per square**  
18           **inch (psi).**

19           **(B) Residential kitchen faucets and replacement aerators shall not**  
20           **exceed a maximum flow rate of 1.8 gpm at 60 psi, with optional temporary**

1 flow of 2.2 gpm, provided they default to a maximum flow rate of 1.8 gpm at  
2 60 psi after each use.

3 (C) Public lavatory faucets and replacement aerators shall not exceed  
4 a maximum flow rate of 0.5 gpm at 60 psi.

5 (D) Showerheads shall not exceed a maximum flow rate of 2.0 gpm  
6 at 80 psi.

7 (15) High CRI fluorescent lamps shall meet the minimum efficacy  
8 requirements contained in 10 C.F.R. § 430.32(n)(4) as that subdivision existed  
9 on January 3, 2017. Compliance with requirements shall be measured in  
10 accordance with 10 C.F.R. Part 430, Subpart B, Appendix R, entitled  
11 “Uniform Test Method for Measuring Average Lamp Efficacy (LE), Color  
12 Rendering Index (CRI), and Correlated Color Temperature (CCT) of Electric  
13 Lamps,” as that appendix existed on January 3, 2017.

14 (16) Urinals ~~and water closets~~, other than those **trough-type urinals**  
15 **and urinals** designed and marketed exclusively for use at prisons or mental  
16 health facilities, shall ~~meet the standards set forth in this subdivision~~ **have**  
17 **a maximum flush volume of 0.5 gallons per flush** when tested in accordance  
18 with 10 C.F.R. Part 430, Subpart B, Appendix T, entitled “Uniform Test  
19 Method for Measuring the Water Consumption of Water Closets and Urinals,”  
20 as in effect on January 3, 2017 and shall pass the waste extraction test for  
21 water closets set forth in Sec. 7.10 of the American Society of Mechanical

1 Engineers (ASME) standard A112.19.2-2013/CSA B.45.1, as that standard  
2 exists on the effective date of this section.

3 ~~(A) Urinals, except for trough-type urinals, shall have a~~  
4 ~~maximum flush volume of 0.5 gallons per flush.~~

5 ~~(B) Water closets, except for dual-flush tank-type water closets,~~  
6 ~~shall have a maximum flush volume of 1.28 gallons per flush.~~

7 ~~(C) Dual-flush tank-type water closets shall have a maximum~~  
8 ~~dual-flush effective flush volume of 1.28 gallons per flush.~~

9 (17) Portable air conditioners shall have a Combined Energy Efficiency  
10 Ratio (CEER), that is greater than or equal to:  $1.04 \times [SACC / (3.7177 \times$   
11  $SACC^{0.6384})]$ .

12 (A) In this subdivision (17), “SACC” means seasonally adjusted  
13 cooling capacity expressed in British thermal units per hour.

14 (B) The CEER shall be measured in accordance with 10 C.F.R. Part  
15 430, Subpart B, Appendix CC, entitled “Uniform Test Method for Measuring  
16 the Energy Consumption of Portable Air Conditioners,” as in effect on  
17 January 3, 2017.

18 (18) Portable electric spas shall meet the requirements of the American  
19 National Standard for Portable Electric Spa Energy Efficiency,  
20 ANSI/APSP/ICC-14 2014, as that standard exists on the effective date of this  
21 section.

1           (19) Residential ventilating fans shall meet the qualification criteria of  
2           the “ENERGY STAR Program Requirements Product Specification for  
3           Residential Ventilating Fans,” Version 3.2.

4           (20) Spray sprinkler bodies shall include an integral pressure regulator  
5           and shall meet the water efficiency and performance criteria and other  
6           requirements of the Environmental Protection Agency’s “WaterSense  
7           Specification for Spray Sprinkler Bodies,” Version 1.0. However, this  
8           subdivision (20) shall not apply to spray sprinkler bodies that are specifically  
9           excluded from the scope of that specification.

10           **(21) Telephones included in the scope of the “ENERGY STAR**  
11           **Program Product Specification for Telephony,” Version 3.0, shall meet the**  
12           **certification criteria of that specification, except that the performance**  
13           **requirements for external power supplies in section 3.2.2 of the**  
14           **specification shall not apply.**

15           (22) In this subdivision (21), “final rule” means the document setting  
16           forth a final action by DOE with respect to a final rule for “Energy  
17           Conservation Standards for Uninterruptible Power Supplies,” docket no.  
18           EERE-2016-BT-STD-0022, approved by DOE on December 28, 2016.  
19           Uninterruptible power supplies that use a National Electrical Manufacturer  
20           Association (NEMA) 1-15P or 5-15P input plug and have an alternating  
21           current (AC) output shall have an average load-adjusted efficiency that meets

1 or exceed the values shown to be codified under 10 C.F.R. § 430.32(z)(3) and  
2 set forth on pages 193–194 of the final rule. Compliance with these  
3 requirements shall be measured in accordance with 10 C.F.R. Part 430,  
4 Subpart B, Appendix Y, entitled “Uniform Test Method for Measuring the  
5 Energy Consumption of Battery Chargers,” as in effect on January 11, 2017.

6 (22) Water coolers included in the scope of the “ENERGY STAR  
7 Program Requirements Product Specification for Water Coolers,” Version 2.0,  
8 shall have “on mode with no water draw” energy consumption less than or  
9 equal to the following values, measured in accordance with the test  
10 requirements of that specification:

11 (A) 0.16 kilowatt-hours (kWh) per day for cold-only units and cook  
12 and cold units;

13 (B) 0.87 kWh per day for storage type hot and cold units; and

14 (C) 0.18 kWh per day for on-demand hot and cold units.

15 (b) When a minimum efficiency standard as described in subsection (a) of  
16 this section sets forth requirements that change over time, the rules shall  
17 provide for compliance with the changed requirements as they come into  
18 effect.

19 **(c) When a subdivision within subdivisions (a)(8) through (a)(22) of**  
20 **this section requires compliance with an efficiency standard or testing**  
21 **protocol contained in a document issued by an agency of the United**

1 **States, another state, or a nationally or internationally recognized**  
2 **organization, the rules of the Commissioner may incorporate the specified**  
3 **standard or protocol by reference pursuant to 3 V.S.A. § 838 rather than**  
4 **setting forth its language.**

5 **(d) With respect to computers and computer monitors subject to**  
6 **subdivision (a)(13) of this section, the Commissioner shall have authority**  
7 **to adopt official interpretations of the applicable efficiency standards**  
8 **published by the staff of the California Energy Commission (CEC). The**  
9 **rules shall state the process for such adoption and the manner in which**  
10 **the Commissioner will make the adopted interpretations publicly**  
11 **available.**

12 Sec. 5. 9 V.S.A. § 2796 is amended to read:

13 § 2796. IMPLEMENTATION

14 \* \* \*

15 ~~(d) One year after the date upon which the sale or offering for sale of~~  
16 ~~certain products becomes subject to the requirements of subsection (a) or (b) of~~  
17 ~~this section, no new products may be installed for compensation in the State~~  
18 ~~unless the efficiency of a new product meets or exceeds the efficiency~~  
19 ~~standards set forth in the rules adopted pursuant to section 2795 of this title.~~

20 **(1) On or after July 1, 2019, no new luminaire that can operate with**  
21 **T12 fluorescent lamps may be sold or offered for sale in the State.**

1           (2) On or after July 1, 2020, no new air compressor, commercial  
2           dishwasher, commercial fryer, commercial hot-food holding cabinet,  
3           commercial steam cooker, computer or computer monitor, faucet, high CRI  
4           fluorescent lamp, ~~portable air conditioner~~, portable electric spa, residential  
5           ventilating fan, showerhead, spray sprinkler body, ~~telephone~~, uninterruptible  
6           power supply, urinal, ~~water closet~~, or water cooler may be sold or offered for  
7           sale, lease, or rent in the State unless the efficiency of the new product meets  
8           or exceeds the efficiency standards set forth in the rules adopted pursuant to  
9           section 2795 of this title.

10           (3) This subdivision governs the date after which no new portable  
11           air conditioner may be sold or offered for sale, lease, or rent in the State  
12           unless the efficiency of the new product meets or exceeds the efficiency  
13           standards set forth in the rules adopted pursuant to section 2795 of this  
14           title (the compliance date).

15           (A) The compliance date shall be on or after February 1, 2022,  
16           unless subdivision (B) of this subdivision (3) applies.

17           (B) If, prior to January 1, 2019, USDOE has published a final  
18           rule in the Federal Register establishing efficiency standards for portable  
19           air conditioners and the rule has not been repealed, voided, or retracted,  
20           the compliance date shall be on or after the date as of which portable air  
21           conditioners are required to comply with the USDOE rule.







1           (3) For each sector, the report shall provide:

2                   (A) In millions of British thermal units (MMBTUs) for the most  
3           recent calendar year for which data are available, the total amount of energy  
4           consumed, the amount of renewable energy consumed, and the percentage of  
5           renewable energy consumed. For the electricity sector, the report shall also  
6           state the amounts in megawatt hours (MWH) and the Vermont and New  
7           England summer and winter peak electric demand, including the hour and day  
8           of peak demand.

9                   (B) Projections of the energy reductions and shift to renewable  
10           energy expected to occur under existing policies, technologies, and markets.  
11           The most recent available data shall be used to inform these projections and  
12           shall be provided as a supplement to the data described in subdivision (A) of  
13           this subdivision (3).

14                   (C) Recommendations of policies to further the renewable energy  
15           goals set forth in statute and the Plan, along with an evaluation of the relative  
16           cost-effectiveness of different policy approaches.

17           (4) The report shall include a supplemental analysis setting forth how  
18           progress toward the goals of the Plan is supported by complementary work in  
19           avoiding or reducing energy consumption through efficiency and demand  
20           reduction. In this subdivision (4), “demand reduction” includes dispatchable

1 measures, such as controlling appliances that consume energy, and  
2 nondispatchable measures, such as weatherization.

3 (5) The report shall include recommendations on methods to enhance  
4 the process for planning, tracking, and reporting progress toward meeting  
5 statutory energy goals and the goals of the Plan. Such recommendations may  
6 include the consolidation of one or more periodic reports filed by the  
7 Department or other State agencies relating to renewable energy, with  
8 proposals for amending the statutes relevant to those reports.

9 (6) The report shall include a summary of the following information for  
10 each sector:

11 (A) major changes in relevant markets, technologies, and costs;

12 (B) average Vermont prices compared to the other New England  
13 states, based on the most recent available data; and

14 (C) significant Vermont and federal incentive programs that are  
15 relevant to one or more of the sectors.

16 Sec. 8. 30 V.S.A. § 218c is amended to read:

17 § 218c. LEAST-COST INTEGRATED PLANNING

18 \* \* \*

19 (b) Each regulated electric or gas company shall prepare and implement a  
20 least-cost integrated plan for the provision of energy services to its Vermont  
21 customers. At least every third year on a schedule directed by the Public

1 Utility Commission, each such company shall submit a proposed plan to the  
2 Department of Public Service and the Public Utility Commission. The  
3 Commission, after notice and opportunity for hearing, may approve a  
4 company’s least-cost integrated plan if it determines that the company’s plan  
5 complies with the requirements of subdivision (a)(1) of this section and of  
6 sections 8004 and 8005 of this title and the recommendations of the  
7 Comprehensive Energy Plan issued under section 202b of this title.

8 \* \* \*

9 Sec. 9. 19 V.S.A. § 10b is amended to read:

10 § 10b. STATEMENT OF POLICY; GENERAL

11 (a) The Agency shall be the responsible agency of the State for the  
12 development of transportation policy. It shall develop a mission statement to  
13 reflect:

14 (1) that State transportation policy shall be to encompass, coordinate,  
15 and integrate all modes of transportation and to consider “complete streets”  
16 principles, which are principles of safety and accommodation of all  
17 transportation system users, regardless of age, ability, or modal preference; and

18 (2) the need for transportation projects that will improve the State’s  
19 economic infrastructure, as well as the use of resources in efficient,  
20 coordinated, integrated, cost-effective, and environmentally sound ways, and

1 that will be consistent with the recommendations of the Comprehensive  
2 Energy Plan (CEP) issued under 30 V.S.A. § 202b.

3 (b) The Agency shall coordinate planning and education efforts with those  
4 of the Vermont Climate Change Oversight Committee and those of local and  
5 regional planning entities:

6 (1) to ~~assure~~ ensure that the transportation system as a whole is  
7 integrated, that access to the transportation system as a whole is integrated, and  
8 that statewide, local, and regional conservation and efficiency opportunities  
9 and practices are integrated; and

10 (2) to support ~~employer~~ employer-led or local or regional government-  
11 led conservation, efficiency, rideshare, and bicycle programs and other  
12 innovative transportation advances, especially employer-based incentives.

13 (c) In developing the State's annual Transportation Program, the Agency  
14 shall, consistent with the planning goals listed in 24 V.S.A. § 4302 as amended  
15 by 1988 Acts and Resolves No. 200 and with appropriate consideration to  
16 local, regional, and State agency plans:

17 (1) Develop or incorporate designs that provide integrated, safe, and  
18 efficient transportation and that are consistent with the recommendations of  
19 the CEP.

20 \* \* \*

1 Sec. 10. 19 V.S.A. § 10i is amended to read:

2 § 10i. TRANSPORTATION PLANNING PROCESS

3 (a) Long-range systems plan. The ~~agency~~ Agency shall establish and  
4 implement a planning process through the adoption of a long-range  
5 multi-modal systems plan integrating all modes of transportation. The  
6 long-range multi-modal systems plan shall be based upon ~~agency~~ Agency  
7 transportation policy developed under section 10b of this title, other policies  
8 approved by the ~~legislature, agency~~ General Assembly, Agency goals, mission,  
9 and objectives, and demographic and travel forecasts, design standards,  
10 performance criteria, and funding availability. The long-range systems plan  
11 shall be developed with participation of the public, and local, and regional  
12 governmental entities; and pursuant to the planning goals and processes set  
13 forth in 1988 Acts and Resolves No. 200 ~~of the Acts of the 1987 Adj. Sess.~~  
14 ~~(1988)~~. The plan shall be consistent with the Comprehensive Energy Plan  
15 (CEP) issued under 30 V.S.A. § 202b.

16 \* \* \*

17 (c) Transportation ~~program~~ Program. The ~~transportation program~~  
18 Transportation Program shall be developed in a fiscally responsible manner to  
19 accomplish the following objectives:



1       **Sec. 11a. REPORT; ELECTRIC GENERATION CONSTRAINTS**

2           **(a) On or before December 15, 2018, the Public Utility Commission**  
3           **(PUC) shall submit a report that analyzes areas of the State in which**  
4           **generation that is interconnected to the electric transmission and**  
5           **distribution system faces constraints due to system capacity and**  
6           **conditions, including the relationship of interconnected generation to**  
7           **existing load and recommends policies to address those areas. This**  
8           **analysis shall include the area of the Sheffield-Highgate Export Interface**  
9           **(SHEI). The report may include any related issues arising from the**  
10          **analysis.**

11          **(b) Prior to submitting this report, the PUC shall provide an**  
12          **opportunity for written submission of relevant comments and information**  
13          **by the public and shall conduct one or more workshops at which the**  
14          **public may provide comments and information. The PUC shall provide**  
15          **prior notice of the opportunity to submit comments and information and**  
16          **of each workshop to the Department of Public Service, each Vermont**  
17          **electric transmission and distribution utility, Renewable Energy Vermont,**  
18          **each holder of a certificate of public good for an electric generation**  
19          **facility within the SHEI area with a capacity greater than 500 kilowatts,**  
20          **and any other person who requests such notice or whom the PUC may**  
21          **determine to notify.**



1 provided. ~~The~~ Except as otherwise provided in subdivision (3) of this  
2 subsection, the amount of the tax shall be six percent of the taxable cost of a:

3 (A) pleasure car as defined in 23 V.S.A. § 4;

4 (B) motorcycle as defined in 23 V.S.A. § 4;

5 (C) motor home as defined in subdivision 8902(11) of this title; or

6 (D) vehicle weighing up to 10,099 pounds, registered pursuant to  
7 23 V.S.A. § 367, other than a farm truck.

8 (2) For any other motor vehicle, it shall be six percent of the taxable cost  
9 of the motor vehicle or \$2,075.00 for each motor vehicle, whichever is smaller,  
10 except that pleasure cars that are purchased, leased, or otherwise acquired for  
11 use in short-term rentals shall be subject to taxation under subsection (d) of this  
12 section.

13 (3)(A) For an all-electric vehicle, the tax shall be six percent of the  
14 amount that the taxable cost exceeds \$30,000.00.

15 (B) For a plug-in hybrid electric vehicle, the tax shall be six percent  
16 of the amount that the taxable cost exceeds \$15,000.00.

17 (b)(1) ~~There~~ Except as otherwise provided in subdivision (3) of this  
18 subsection, there is hereby imposed upon the use within this State a tax of six  
19 percent of the taxable cost of a:

20 (A) pleasure car as defined in 23 V.S.A. § 4;

21 (B) motorcycle as defined in 23 V.S.A. § 4;

1 (C) motor home as defined in subdivision 8902(11) of this title; or

2 (D) vehicle weighing up to 10,099 pounds, registered pursuant to  
3 23 V.S.A. § 367, other than a farm truck.

4 (2) For any other motor vehicle, it shall be six percent of the taxable cost  
5 of the motor vehicle or \$2,075.00 for each motor vehicle, whichever is smaller,  
6 by a person at the time of first registering or transferring a registration to such  
7 motor vehicle payable as hereinafter provided, except no use tax shall be  
8 payable hereunder if the tax imposed by subsection (a) of this section has been  
9 paid, or the vehicle is a pleasure car that was purchased, leased, or otherwise  
10 acquired for use in short-term rentals, in which case the vehicle shall be subject  
11 to taxation under subsection (d) of this section.

12 (3)(A) For an all-electric vehicle, the tax shall be six percent of the  
13 amount that the taxable cost exceeds \$30,000.00.

14 (B) For a plug-in hybrid electric vehicle, the tax shall be six percent  
15 of the amount that the taxable cost exceeds \$15,000.00.

16 \* \* \*

1           \* \* \* Supplemental Registration Fees for Plug-in Electric Vehicles \* \* \*

2           Sec. 13. 23 V.S.A. § 361 is amended to read:

3           § 361. PLEASURE CARS; ELECTRIC VEHICLES

4           (a) The annual fee for registration of any motor vehicle of the pleasure car  
5           type, and all vehicles powered by electricity, shall be \$74.00, and the biennial  
6           fee shall be \$136.00.

7           (b) In addition to the fees prescribed in subsection (a) of this section, plug-  
8           in electric vehicles shall be subject to the following supplemental fees:

9           (1) hybrid plug-in: \$50.00 for an annual registration and \$100.00 for a  
10           biennial registration.

11           (2) all-electric: \$100.00 for an annual registration and \$200.00 for a  
12           biennial registration.

13           (c) Monies collected pursuant to subsection (b) of this section shall be  
14           allocated as follows, with monies allocated to the Clean Energy Development  
15           Fund (CEDF) established in 30 V.S.A. § 8015 to be reserved to support  
16           electric vehicles and associated charging stations as directed in 30 V.S.A.  
17           § 8015(c):

18           (1) for monies collected in fiscal year 2019, 80 percent to the CEDF and  
19           20 percent to the Transportation Fund;

20           (2) for monies collected in fiscal year 2020, 70 percent to the CEDF and  
21           30 percent to the Transportation Fund; and

1           (3) for monies collected in fiscal year 2021, 60 percent to the CEDF and  
2           40 percent to the Transportation Fund.

3           Sec. 14. REPEAL

4           23 V.S.A. § 361(b) and (c) (supplemental registration fee for plug-in  
5           electric vehicles; allocation) are repealed.

6           Sec. 15. 30 V.S.A. § 8015 is amended to read:

7           § 8015. VERMONT CLEAN ENERGY DEVELOPMENT FUND

8           (a) Creation of Fund.

9           (1) There is established the Vermont Clean Energy Development Fund  
10          to consist of each of the following:

11           (A) ~~The~~ the proceeds due the State under the terms of the  
12          memorandum of understanding between the Department of Public Service and  
13          Entergy Nuclear VY and Entergy Nuclear Operations, Inc. that was entered  
14          under Public Service Board docket 6812; together with the proceeds due the  
15          State under the terms of any subsequent memoranda of understanding entered  
16          before July 1, 2005 between the Department of Public Service and Entergy  
17          Nuclear VY and Entergy Nuclear Operations, Inc.;

18           (B) supplemental electric vehicle registration fees as specified in  
19          23 V.S.A. § 361(c); and

20           (C) ~~Any~~ any other monies that may be appropriated to or deposited  
21          into the Fund.



1 this title to acquire all reasonably available cost-effective energy efficiency  
2 resources for the benefit of Vermont ratepayers and the power system.

3 \* \* \*

4 Sec. 16. 30 V.S.A. § 8015 is amended to read:

5 § 8015. VERMONT CLEAN ENERGY DEVELOPMENT FUND

6 (a) Creation of Fund.

7 (1) There is established the Vermont Clean Energy Development Fund  
8 to consist of each of the following:

9 (A) the proceeds due the State under the terms of the memorandum  
10 of understanding between the Department of Public Service and Entergy  
11 Nuclear VY and Entergy Nuclear Operations, Inc. that was entered under  
12 Public Service Board docket 6812; together with the proceeds due the State  
13 under the terms of any subsequent memoranda of understanding entered before  
14 July 1, 2005 between the Department of Public Service and Entergy Nuclear  
15 VY and Entergy Nuclear Operations, Inc.;

16 (B) ~~supplemental electric vehicle registration fees as specified in~~  
17 ~~23 V.S.A. § 361(e); and [Repealed.]~~

18 (C) any other monies that may be appropriated to or deposited into  
19 the Fund.

20 (2) Balances in the Fund shall be expended solely for the purposes set  
21 forth in this subchapter and shall not be used for the general obligations of

1 government. All balances in the Fund at the end of any fiscal year shall be  
2 carried forward and remain part of the Fund. Interest earned by the Fund shall  
3 be deposited in the Fund. This Fund is established in the State Treasury  
4 pursuant to 32 V.S.A. chapter 7, subchapter 5.

5 \* \* \*

6 (c) Purposes of Fund. The purposes of the Fund shall be to promote the  
7 development and deployment of cost-effective and environmentally sustainable  
8 electric power and thermal energy or geothermal resources for the long-term  
9 benefit of Vermont consumers, primarily with respect to renewable energy  
10 resources, and the use of combined heat and power technologies. The Fund  
11 also may be used to support natural gas and electric vehicles in accordance  
12 with subdivisions (d)(1)(K) and (L) of this section, respectively ~~and, in the~~  
13 ~~ease of funds from supplemental electric vehicle registration fees described in~~  
14 ~~subdivision (a)(1)(B) of this section, these funds shall be used exclusively to~~  
15 ~~support electric vehicles and associated charging stations in accordance with~~  
16 ~~subdivision (d)(1)(L).~~ The General Assembly expects and intends that the  
17 Public Utility Commission, the Department of Public Service, and the State's  
18 power and efficiency utilities will actively implement the authority granted in  
19 this title to acquire all reasonably available cost-effective energy efficiency  
20 resources for the benefit of Vermont ratepayers and the power system.

21 \* \* \*

1 Sec. 17. 19 V.S.A. § 11 is amended to read:

2 § 11. TRANSPORTATION FUND

3 ~~The~~ Except as otherwise specifically provided by law, the Transportation  
4 Fund shall comprise the following:

5 (1) all taxes, penalties, and fees received by the Commissioner of  
6 Motor Vehicles except those relating to motorboats imposed under 23 V.S.A.  
7 chapter 29, which shall be expended pursuant to 23 V.S.A. § 3319;

8 \* \* \*

9 Sec. 18. REPORT AND RECOMMENDATIONS; ELECTRIC VEHICLE

10 CONTRIBUTION TO TRANSPORTATION INFRASTRUCTURE

11 (a) On or before December 15, 2020, the Secretary of Transportation  
12 (Secretary) and the Public Utility Commission (PUC) jointly shall file a report  
13 that analyzes multiple methods for ensuring that plug-in electric vehicles (EVs)  
14 owned or used in Vermont contribute, commensurately in comparison to other  
15 types of vehicles, for their use of the State's transportation infrastructure. The  
16 report shall include their recommendation on which of those methods the State  
17 of Vermont should adopt.

18 (b) Prior to submitting this report, the Secretary and PUC shall provide an  
19 opportunity for written submission of relevant comments and information by  
20 the public and shall conduct one or more public meetings at which the public  
21 may provide such comments and information.

1       (c) Methods analyzed in the report shall include continuation or  
2       modification of the partial exemption from the purchase and use tax authorized  
3       in Sec. 12 of this act or the supplemental registration fee authorized in Sec. 13  
4       of this act, assessing a fee based on vehicle mileage, assessing a fee per  
5       kilowatt hour delivered to an EV in Vermont, and other methods that the  
6       Secretary and the PUC consider to merit exploration.

7       (d) In the report, the Secretary and the PUC shall consider whether the  
8       revenues generated from EVs should be allocated between the Transportation  
9       Fund and the Clean Energy Development Fund and, if so, shall provide a  
10       recommended allocation.

11       (e) The Secretary and PUC shall submit the report to the House  
12       Committees on Energy and Technology and on Transportation and to the  
13       Senate Committees on Finance, on Natural Resources and Energy, and on  
14       Transportation.

15               \* \* \* Authority to Reserve Parking Spaces for Plug-in

16                               Electric Vehicles \* \* \*

17       Sec. 19. 23 V.S.A. § 1104 is amended to read:

18       § 1104. STOPPING PROHIBITED

19       (a) Except when necessary to avoid conflict with other traffic, or in  
20       compliance with law or the directions of an enforcement officer or official  
21       traffic-control device, no person may:

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\* \* \*

(3) Park a vehicle, whether occupied or not, except temporarily for the purpose of and while actually engaged in loading or unloading merchandise or a passenger:

(A) within 50 feet of the nearest rail of a railroad crossing;

(B) at any place where official signs prohibit parking;

(C) at any place where official signs restrict parking to specific sizes or types of vehicles and the vehicle violates the restrictions.

\* \* \*

Sec. 20. 23 V.S.A. § 1106 is amended to read:

§ 1106. LIMITATIONS ON USE OF STATE HIGHWAY FACILITIES

(a) As used in this section, “State highway facility” means a State highway rest area, picnic ground, parking area, or park-and-ride facility.

(b) No person shall enter or remain on any State highway facility for the purpose of overnight camping unless the particular facility has been designated for that purpose by the Traffic Committee.

(c)(1) On the basis of an engineering and traffic investigation or findings as to adverse effects on the quiet enjoyment and property values of people living adjacent to a State highway facility, the Traffic Committee may designate the size and types of vehicles allowed to park in a State highway facility or in particular areas of a State highway facility.

1           (2) In addition, the Secretary may prescribe that only plug-in electric  
2           vehicles are permitted to park in designated areas of a State highway facility.

3           (d) Notice of the prohibitions or restrictions under this section shall be  
4           posted at the affected facilities by regulatory signs conforming to the Manual  
5           on Uniform Traffic Control Devices.

6           Sec. 21. 23 V.S.A. § 1008a is amended to read:

7           § 1008a. REGULATION OF MOTOR VEHICLES AT STATE AIRPORTS

8           (a)(1) The Secretary may adopt rules governing the operation, use, and  
9           parking of motor vehicles on the grounds of State airports, including the  
10          access roads.

11          (2) In addition, the Secretary may prescribe that only plug-in electric  
12          vehicles are permitted to park in designated areas on such grounds.

13          (b) Signs indicating the ~~special regulations~~ rules or restrictions shall be  
14          conspicuously posted in and near all areas affected.

15          \* \* \* Charging Stations; Public Utility Commission Jurisdiction \* \* \*

16          Sec. 22. 30 V.S.A. § 201 is amended to read:

17          § 201. DEFINITIONS

18          (a) As used in this chapter, the word “company” or “companies” means and  
19          includes individuals, partnerships, associations, corporations, and  
20          municipalities owning or conducting any public service business or property  
21          used in connection therewith and covered by the provisions of this chapter.



1 premises at a rate that is reduced from what the customer otherwise would pay  
2 the company for consuming electric energy. The Commission shall provide  
3 notice and opportunity for hearing prior to approving or requiring such a rate  
4 schedule. The Commission may approve or require such a schedule after  
5 finding all of the following:

6 (1) The schedule will provide benefits to the company's transmission or  
7 distribution system, or both, such as increasing the efficient use of the system  
8 through encouraging nighttime charging of EVs.

9 (2) The schedule will provide benefits to the ratepayers of the company  
10 that outweigh any costs to those ratepayers.

11 (3) Implementation of the schedule will result in avoided environmental  
12 and public health costs of greenhouse gas emissions, and the amount of those  
13 avoided costs exceeds the costs caused by the schedule and its implementation.

14 Sec. 24. INVESTIGATION; ELECTRIC VEHICLE RATE SCHEDULES

15 (a) On or before July 1, 2019, the Public Utility Commission shall open  
16 and complete an investigation and issue a final order concerning the  
17 establishment of rate schedules under which a customer may charge a plug-in  
18 electric vehicle on the customer's premises (on-premise charging) at a rate that  
19 is reduced from what the customer otherwise would pay the company for  
20 consuming electric energy.

1           (1) Terms used in this section that are defined in 30 V.S.A. § 8002 shall  
2           have the same meaning as in that statute.

3           (2) Parties to the investigation shall include the Department of Public  
4           Service and the Vermont retail electricity providers.

5           (b) Issues addressed in the Commission’s final order in this investigation  
6           shall include:

7           (1) The potential existence and amount of economic benefit to the  
8           Vermont transmission and distribution system that may be obtained from  
9           encouraging on-premise charging.

10          (2) The environmental and public health costs that may be avoided  
11          through encouraging on-premise charging, including the quantification of  
12          those costs.

13          (3) The parameters of a rate schedule that would be needed to encourage  
14          on-premise charging in a manner that captures the benefits and avoids the costs  
15          described in subdivisions (1) and (2) of this subsection, respectively, and  
16          otherwise avoids or reduces the imposition of costs on ratepayers who do not  
17          engage in such charging.

18          (c) If, after consideration of the issues identified in subsection (b) of this  
19          section, the Commission finds that reduced rate schedules for on-premise  
20          charging should be instituted, the Commission’s final order shall require each

1 Vermont retail electricity provider to submit, by a date certain, a proposed rate  
2 schedule that complies with 30 V.S.A. § 218(h).

3 \* \* \* Agency of Agriculture, Food and Markets; Weights and Measures;  
4 Electric Vehicle Charging Stations; Inspection and Enforcement \* \* \*

5 Sec. 25. 9 V.S.A. § 2651(14) is amended to read:

6 (14) “Weights and measures” means all weights and measures of every  
7 kind, instruments and devices for weighing and measuring, and any appliances  
8 and accessories associated with any or all such instruments and devices,  
9 including meters for the measurement of electricity offered for sale at an  
10 electric vehicle charging station, but not including meters for the measurement  
11 of electricity, natural or manufactured gas (~~natural or manufactured~~), or water  
12 when they are operated in a public utility system. Such electricity, gas, and  
13 water meters are specifically excluded from the purview of this chapter, and  
14 this chapter shall not apply to such meters or to any appliances or accessories  
15 associated therewith.

16 \* \* \* Charging Stations; Exclusion from Net Metering \* \* \*

17 Sec. 26. 30 V.S.A. § 8002(16) is amended to read:

18 (16) “Net metering system” means a plant for generation of electricity  
19 that:

20 (A) is of no more than 500 kW capacity;

1 (B) operates in parallel with facilities of the electric distribution  
2 system;

3 (C) is intended primarily to offset the customer’s own electricity  
4 requirements and does not supply electricity to a charging station for the retail  
5 sale of electricity to plug-in electric vehicles; and

6 (D)(i) employs a renewable energy source; or

7 (ii) is a qualified micro-combined heat and power system of  
8 20 kW or fewer that meets the definition of combined heat and power in  
9 subsection 8015(b) of this title and uses any fuel source that meets air quality  
10 standards.

11 Sec. 27. 30 V.S.A. § 8010(c)(2)(F)(iii) is added to read:

12 (iii) A bill credit for kWh generated by a net metering system shall  
13 not be assigned to a customer account that serves premises containing a  
14 charging station for the retail sale of electricity to plug-in electric vehicles.

15 \* \* \* Effective Dates \* \* \*

16 Sec. 28. EFFECTIVE DATES

17 **(a) This section and Secs. 11b (RES rulemaking) and 24 (investigation;**  
18 **electric vehicle rate schedules) shall take effect on passage.**

19 **(b) Secs. 14 (repeal of 23 V.S.A. § 361(b) and (c)) and 16 (prospective**  
20 **amendment of 30 V.S.A. § 8015) shall take effect on July 1, 2021.**

21 **(c) All other sections shall take effect on July 1, 2018.**

1       **and that after passage the title of the bill be amended to read: “An act**  
2       **relating to appliance efficiency, energy planning, and electric vehicles”**

3

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5       (Committee vote: \_\_\_\_\_)

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\_\_\_\_\_

7

Senator \_\_\_\_\_

8

FOR THE COMMITTEE

DRAFT