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H.410

SHORT FORM

Introduced by Representatives Gardner of Richmond, McCormack of Burlington, Buckholz of Hartford, Christie of Hartford, Donovan of Burlington, Dunn of Essex, Gannon of Wilmington, Hill of Wolcott, O’Sullivan of Burlington, Squirrell of Underhill, Sullivan of Burlington, Townsend of South Burlington, and Weed of Enosburgh

Referred to Committee on

Date:

Subject: Energy; commerce and trade; energy efficiency standards for appliances and equipment

Statement of purpose of bill as introduced: This bill proposes to amend Vermont’s energy efficiency standards for appliances and equipment to include the following products, which are not currently covered by federal energy efficiency standards: computers and monitors; “high CRI” linear fluorescent lamps; deep dimming fluorescent ballasts; faucets, urinals, and water closets; portable electric spas; commercial hot food holding cabinets; and water dispensers.

~~An act relating to adding products to Vermont’s energy efficiency standards~~

~~for appliances and equipment~~ *An act relating to appliance efficiency, energy planning, and electric vehicle parking.*

1 It is hereby enacted by the General Assembly of the State of Vermont:

2 ~~(TEXT OMITTED IN SHORT FORM BILLS)~~

Sec. 1. PURPOSE

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

(b) The purpose of this act is to obtain the benefits found in 9 V.S.A. § 2792 for the following products to which the State's efficiency standards do not currently apply: air compressors, commercial dishwashers, commercial fryers, commercial hot-food holding cabinets, commercial steam cookers, computers and computer monitors, faucets, high color rendering index fluorescent lamps, portable air conditioners, portable electric spas, residential ventilating fans, showerheads, spray sprinkler bodies, telephones, uninterruptible power supplies, urinals, water closets, and water coolers.

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

~~§ 2793. DEFINITIONS~~

As used in this chapter:

* * *

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

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

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

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

(18) "Commercial fryer" means an appliance, including a cooking vessel, in which oil is placed to such a depth that the cooking food is supported by displacement of the cooking fluid rather than by the bottom of the vessel.

Heat is delivered to the cooking fluid by means of an immersed electric element of band-wrapped vessel or by heat transfer from gas burners either through the walls of the fryer or through tubes passing through the cooking fluid.

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

(20) "Commercial steam cooker" means a device with one or more food-steaming compartments in which the energy in the steam is transferred to the food by direct contact. A commercial steam cooker may also be known as a compartment steamer.

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

(A) At a minimum, a computer includes:

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

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

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

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

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

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

(A) displays with integrated or replaceable batteries designed to support primary operation without AC mains or external DC power, such as

~~electronic readers, mobile phones, tablets, battery-powered digital picture frames; or~~

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

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

~~(24) With respect to faucets and showerheads, the following definitions apply:~~

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

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

~~(ii) "Public lavatory faucet" means a fitting intended to be installed in nonresidential bathrooms that are exposed to walk-in traffic.~~

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

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

~~(24)(B):~~

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

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

~~(25) “High color rendering index (CRI) fluorescent lamp” means a fluorescent lamp with a color rendering index of 87 or greater that is not a compact fluorescent lamp.~~

~~(26) “Portable electric spa” means a factory-built electric spa or hot tub, which may or may not include any combination of integral controls, water heating, or water circulating equipment.~~

~~(27) With respect to portable air conditioners, the following definitions apply:~~

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

~~(B) “Single-duct portable air conditioner” means a portable air~~

~~conditioner that draws all of the condenser inlet air from the conditioned space without the means of a duct and discharges the condenser outlet air outside the conditioned space through a single duct attached to an adjustable window bracket.~~

~~(C) “Dual-duct portable air conditioner” means a portable air conditioner that draws some or all of the condenser inlet air from outside the conditioned space through a duct attached to an adjustable window bracket, may draw additional condenser inlet air from the conditioned space, and discharges the condenser outlet air outside the conditioned space by means of a separate duct attached to an adjustable window bracket.~~

~~(28) “Residential ventilating fan” means a ceiling, wall-mounted, or remotely mounted in-line fan designed to be used in a bathroom or utility room, or a kitchen range hood, whose purpose is to move air from inside the building to the outdoors.~~

~~(29) With respect to spray sprinkler bodies, the following definitions apply:~~

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

~~(B) “Spray sprinkler body” means the exterior case or shell of a sprinkler incorporating a means of connection to the piping system designed to~~

~~convey water to a nozzle or orifice.~~

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

~~(31) "Uninterruptible power supply" means a battery charger consisting of a combination of convertors, switches, and energy storage devices, such as batteries, constituting a power system that maintains continuity of load power in case of input power failure.~~

~~(32) With respect to urinals and water closets, the following definitions apply:~~

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

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

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

~~(D) "Urinal" means a plumbing fixture that receives only liquid body waste and conveys the waste through a trap into a drainage system.~~

~~(E) "Water closet" means a plumbing fixture having a~~

containing receptor that receives liquid and solid body waste through an exposed, integral trap into a drainage system.

(F) "Trough-type urinal" means a urinal designed for simultaneous use by two or more persons.

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

(A) "Cold-only unit" means a water cooler that dispenses cold water only.

(B) "Cool and cold unit" means a water cooler that dispenses both cold and room-temperature water.

(C) "Hot and cold unit" means a water cooler that dispenses both hot and cold water. A hot and cold unit also may dispense room-temperature water.

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

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

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

Sec. 5. 9 V.S.A. § 2794 is amended to read.

~~§ 2704 SCOPE~~

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

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

~~(2) Metal halide lamp fixtures.~~

~~(3) Residential furnaces and residential boilers.~~

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

~~(5) State-regulated incandescent reflector lamps.~~

~~(6) General service lamps.~~

~~(7) Air compressors.~~

~~(8) Commercial dishwashers.~~

~~(9) Commercial fryers.~~

~~(10) Commercial hot-food holding cabinets.~~

~~(11) Commercial steam cookers.~~

~~(12) Computers and computer monitors.~~

~~(13) Faucets.~~

~~(14) High CRI fluorescent lamps.~~

~~(15) Portable air conditioners.~~

~~(16) Portable electric spas.~~

~~(17) Residential ventilating fans.~~

~~(18) Showerheads.~~

~~(19) Spray sprinkler bodies.~~

~~(20) Telephones.~~

~~(21) Uninterruptible power supplies.~~

~~(22) Urinals.~~

~~(23) Water closets.~~

~~(24) Water coolers.~~

~~(25) Each other product for which the Commissioner is required to adopt an efficiency or water conservation standard by rule pursuant to section 2795 of this title.~~

~~(8)(26) Any other product that may be designated by the Commissioner in accordance with section 2797 of this title.~~

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

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

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

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

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

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

~~§ 2705. EFFICIENCY AND WATER CONSERVATION STANDARDS~~

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

~~* * *~~

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

~~* * *~~

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

~~* * *~~

~~(6) In the rules, the Commissioner shall adopt minimum efficiency and water conservation standards for each product that is subject to a standard under 10 C.F.R. §§ 430 and 431 as those provisions existed on January 19, 2017. The minimum standard and the testing protocol for each product shall~~

~~be the same as adopted in those sections of the Code of Federal Regulations, except that for faucets, showerheads, urinals, and water closets, the minimum standard and testing protocol shall be as otherwise set forth in this section.~~

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

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

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

specification.

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

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

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

(13) Computers and computer monitors shall meet the requirements of 20 California Code of Regulations (C.C.R.) § 1605.3(v) and compliance with these requirements shall be measured in accordance with test methods prescribed in 20 C.C.R. § 1604(v). The referenced portions of the C.C.R. shall be those adopted on or before the effective date of this section.

(14) Faucets, except for metering faucets, and showerheads shall meet the standards set forth in this subdivision (14) when tested in accordance with

10 C.F.R. Part 430, Subpart B, Appendix S, entitled “Uniform Test Method for Measuring the Water Consumption of Faucets and Showerheads,” as in effect on January 3, 2017.

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

(B) Residential kitchen faucets and replacement aerators shall not exceed a maximum flow rate of 1.8 gpm at 60 psi, with optional temporary flow of 2.2 gpm, provided they default to a maximum flow rate of 1.8 gpm at 60 psi after each use.

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

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

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

~~(16) Urinals and water closets, other than those designed and marketed exclusively for use at prisons or mental health facilities, shall meet the standards set forth in this subdivision (16) when tested in accordance with 10 C.F.R. Part 430, Subpart B, Appendix T, entitled "Uniform Test Method for Measuring the Water Consumption of Water Closets and Urinals," as in effect on January 3, 2017 and shall pass the waste extraction test for water closets set forth in Sec. 7.16 of the American Society of Mechanical Engineers (ASME) standard A112.19.2-2013/CSA B.45.1, as that standard exists on the effective date of this section.~~

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

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

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

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

~~(A) In this subdivision (17), "SACC" means seasonally adjusted cooling capacity expressed in British thermal units per hour.~~

~~(B) The CEER shall be measured in accordance with 10 C.F.R. Part~~

~~430. Subpart B, Appendix CC, entitled "Uniform Test Method for Measuring the Energy Consumption of Portable Air Conditioners," as in effect on January 3, 2017.~~

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

~~(19) Residential ventilating fans shall meet the qualification criteria of the "ENERGY STAR Program Requirements Product Specification for Residential Ventilating Fans," Version 3.2.~~

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

~~(21) Telephones included in the scope of the "ENERGY STAR Program Product Specification for Telephony," Version 3.0, shall meet the certification criteria of that specification, except that the performance requirements for external power supplies in section 3.2.2 of the specification shall not apply.~~

~~(22) In this subdivision (22), "final rule" means the document setting~~

~~forth a final action by DOE with respect to a final rule for “Energy Conservation Standards for Uninterruptible Power Supplies,” docket no. EERE-2016-BT-STD-0022, approved by DOE on December 28, 2016. Uninterruptible power supplies that use a National Electrical Manufacturer Association (NEMA) 1-15P or 5-15P input plug and have an alternating current (AC) output shall have an average load-adjusted efficiency that meets or exceed the values shown to be codified under 10 C.F.R. § 430.32(z)(3) and set forth on pages 193–194 of the final rule. Compliance with these requirements shall be measured in accordance with 10 C.F.R. Part 430, Subpart B, Appendix Y, entitled “Uniform Test Method for Measuring the Energy Consumption of Battery Chargers,” as in effect on January 11, 2017.~~

~~(23) Water coolers included in the scope of the “ENERGY STAR Program Requirements Product Specification for Water Coolers,” Version 2.0, shall have “on mode with no water draw” energy consumption less than or equal to the following values, measured in accordance with the test requirements of that specification:~~

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

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

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

~~(b) When a minimum efficiency standard as described in subsection (a) of~~

~~this section sets forth requirements that change over time, the rules shall provide for compliance with the changed requirements as they come into effect.~~

Sec. 5. 19 V.S.A. § 2796 is amended to read:

§ 2796. IMPLEMENTATION

* * *

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

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

~~(2) The prohibition set forth in subdivision (1) of this subsection shall not apply to a product that the seller or lessor purchased on or before June 30,~~

~~2020~~

~~***~~

~~Sec. 6. RULEMAKING~~

~~On or before May 1, 2019, the Commissioner of Public Service shall file with the Secretary of State proposed rules to implement Secs. 2 through 4 of this act.~~

~~Sec. 7. EFFECTIVE DATE~~

~~This act shall take effect on July 1, 2018.~~

~~*** Appliance Efficiency ***~~

~~Sec. 1. PURPOSE~~

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

~~(b) The purpose of this act is to obtain the benefits found in 9 V.S.A. § 2792 for the following products to which the State's efficiency standards under 9 V.S.A. chapter 74 do not currently apply: air compressors, commercial dishwashers, commercial fryers, commercial hot-food holding cabinets,~~

commercial steam cookers, computers and computer monitors, faucets, high color rendering index fluorescent lamps, portable air conditioners, portable electric spas, residential ventilating fans, showerheads, spray sprinkler bodies, uninterruptible power supplies, urinals, and water coolers.

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

§ 2793. DEFINITIONS

As used in this chapter:

* * *

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

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

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

(17) “Commercial dishwasher” means a machine designed to clean and sanitize plates, pots, pans, glasses, cups, bowls, utensils, and trays by applying

sprays of detergent solution, with or without blasting media granules, and a sanitizing rinse. The phrase “commercial dishwasher” does not include dishwashers intended for consumer use as defined in 10 C.F.R. § 430.2.

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

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

(20) “Commercial steam cooker” means a device with one or more food-steaming compartments in which the energy in the steam is transferred to the food by direct contact. A commercial steam cooker may also be known as a compartment steamer.

(21) “ENERGY STAR Program” means the federal program initiated by

the U.S. Environmental Protection Agency pursuant to 42 U.S.C. § 7403(g) that includes certification of energy-saving products, buildings, and tools, and includes other resources for saving energy.

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

(A) “Faucet” means a lavatory faucet, kitchen faucet, metering faucet, public lavatory faucet, or replacement aerator for a lavatory, public lavatory, or kitchen faucet. As used in this subdivision (22)(A):

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

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

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

(B) “Showerhead” means an accessory to a supply fitting for spraying water onto a bather, typically from an overhead position. The term includes a body spray and handheld shower. As used in this subdivision (22)(B):

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

(ii) “Handheld shower” means a showerhead that can be held or

fixed in place for the purpose of spraying water onto a bather and that is connected to a flexible hose.

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

(24) “Luminaire” means a complete lighting unit consisting of a fluorescent lamp or lamps, together with parts designed to distribute the light, to position and protect such lamps, and to connect such lamps to the power supply through the ballast.

(25) With respect to portable air conditioners, the following definitions apply:

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

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

window bracket.

(C) “Dual-duct portable air conditioner” means a portable air conditioner that draws some or all of the condenser inlet air from outside the conditioned space through a duct attached to an adjustable window bracket, may draw additional condenser inlet air from the conditioned space, and discharges the condenser outlet air outside the conditioned space by means of a separate duct attached to an adjustable window bracket.

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

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

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

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

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

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

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

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

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

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

(E) The lamp has a nominal rating of 95 watts, is 96 inches in length and one and one-half inches in diameter, and conforms to ANSI standard C78.81-2003 (Data Sheet 7881-ANSI-1017-1). Such a lamp is often referred

to as an “F96T12HO/ES lamp.”

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

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

(31) With respect to urinals, the following definitions apply:

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

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

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

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

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

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

(C) "Hot and cold unit" means a water cooler that dispenses both hot and cold water. A hot and cold unit also may dispense room-temperature water.

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

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

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

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

§ 2794. SCOPE

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

- (1) Medium voltage dry-type distribution transformers.
- (2) Metal halide lamp fixtures.
- (3) Residential furnaces and residential boilers.
- (4) Single-voltage external AC to DC power supplies.
- (5) State-regulated incandescent reflector lamps.
- (6) General service lamps.

(7) Air compressors.

(8) Commercial dishwashers.

(9) Commercial fryers.

(10) Commercial hot-food holding cabinets.

(11) Commercial steam cookers.

(12) Computers and computer monitors.

(13) Faucets.

(14) High CRI fluorescent lamps.

(15) Portable air conditioners.

(16) Portable electric spas.

(17) Residential ventilating fans.

(18) Showerheads.

(19) Spray sprinkler bodies.

(20) Uninterruptible power supplies.

(21) Urinals.

(22) Water coolers.

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

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

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

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

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

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

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

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

§ 2795. EFFICIENCY AND WATER CONSERVATION STANDARDS

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

** * **

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

** * **

(C) For purposes of this subdivision (4), the efficiency of single-

voltage external AC to DC power supplies shall be measured in accordance with the test methodology specified by the U.S. Environmental Protection Agency's Energy Star ENERGY STAR Program, "Test Method for Calculating the Energy Efficiency of Single-Voltage External AC-DC and AC-AC Power Supplies (August 11, 2004)."

* * *

(6) In the rules, the Commissioner shall adopt minimum efficiency and water conservation standards for each product that is subject to a standard under 10 C.F.R. §§ 430 and 431 as those provisions existed on January 19, 2017. The minimum standard and the testing protocol for each product shall be the same as adopted in those sections of the Code of Federal Regulations, except that for faucets, showerheads, and urinals, the minimum standard and testing protocol shall be as otherwise set forth in this section.

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

(8) In this subdivision (8), "final rule" means the document setting forth a final action by the U.S. Department of Energy (DOE) with respect to a final rule for "Energy Conservation Standards for Air Compressors," docket no. EERE-2013-BT-STD-0040, approved by DOE on December 5, 2016. Air

compressors that meet the 12 criteria to be codified under 10 C.F.R. § 431.345(a) and set forth on pages 350 to 351 of the final rule shall meet the requirements contained in Table 1 on page 352 of the final rule using the instructions to be codified under 10 C.F.R. § 431.345(b) and set forth on page 353 of the final rule. Compliance with these requirements shall be measured in accordance with 10 C.F.R. Part 431, Subpart T, Appendix A, entitled “Uniform Test Method for Certain Air Compressors,” as in effect on July 3, 2017.

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

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

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

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

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

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

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

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

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

on January 3, 2017.

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

(B) Residential kitchen faucets and replacement aerators shall not exceed a maximum flow rate of 1.8 gpm at 60 psi, with optional temporary flow of 2.2 gpm, provided they default to a maximum flow rate of 1.8 gpm at 60 psi after each use.

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

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

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

(16) Urinals, other than trough-type urinals and urinals designed and marketed exclusively for use at prisons or mental health facilities, shall have a

maximum flush volume of 0.5 gallons per flush when tested in accordance with 10 C.F.R. Part 430, Subpart B, Appendix T, entitled “Uniform Test Method for Measuring the Water Consumption of Water Closets and Urinals,” as in effect on January 3, 2017 and shall pass the waste extraction test for water closets set forth in Sec. 7.10 of the American Society of Mechanical Engineers (ASME) standard A112.19.2-2013/CSA B.45.1, as that standard exists on the effective date of this section.

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

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

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

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

(19) Residential ventilating fans shall meet the qualification criteria of

the “ENERGY STAR Program Requirements Product Specification for Residential Ventilating Fans,” Version 3.2.

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

(21) In this subdivision (21), “final rule” means the document setting forth a final action by DOE with respect to a final rule for “Energy Conservation Standards for Uninterruptible Power Supplies,” docket no. EERE-2016-BT-STD-0022, approved by DOE on December 28, 2016. Uninterruptible power supplies that use a National Electrical Manufacturer Association (NEMA) 1-15P or 5-15P input plug and have an alternating current (AC) output shall have an average load-adjusted efficiency that meets or exceed the values shown to be codified under 10 C.F.R. § 430.32(z)(3) and set forth on pages 193–194 of the final rule. Compliance with these requirements shall be measured in accordance with 10 C.F.R. Part 430, Subpart B, Appendix Y, entitled “Uniform Test Method for Measuring the Energy Consumption of Battery Chargers,” as in effect on January 11, 2017.

(22) Water coolers included in the scope of the “ENERGY STAR

Program Requirements Product Specification for Water Coolers,” Version 2.0, shall have “on mode with no water draw” energy consumption less than or equal to the following values, measured in accordance with the test requirements of that specification:

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

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

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

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

(c) When a subdivision within subdivisions (a)(8) through (a)(22) of this section requires compliance with an efficiency standard or testing protocol contained in a document issued by an agency of the United States, another state, or a nationally or internationally recognized organization, the rules of the Commissioner may incorporate the specified standard or protocol by reference pursuant to 3 V.S.A. § 838 rather than setting forth its language.

(d) With respect to computers and computer monitors subject to subdivision (a)(13) of this section, the Commissioner shall have authority to adopt official interpretations of the applicable efficiency standards published by the staff of the California Energy Commission (CEC). The rules shall state the process for

such adoption and the manner in which the Commissioner will make the adopted interpretations publicly available.

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

§ 2796. IMPLEMENTATION

* * *

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

(1) On or after July 1, 2019, no new luminaire that is designed and marketed to operate with T12 fluorescent lamps may be sold or offered for sale in the State. This prohibition shall not apply to a luminaire that the seller purchased on or before June 30, 2019.

(2) On or after July 1, 2020, no new air compressor, commercial dishwasher, commercial fryer, commercial hot-food holding cabinet, commercial steam cooker, computer or computer monitor, high CRI fluorescent lamp, portable electric spa, residential ventilating fan, spray sprinkler body, uninterruptible power supply, or water cooler may be sold or offered for sale, lease, or rent in the State unless the efficiency of the new product meets or exceeds the efficiency standards set forth in the rules adopted pursuant to

section 2795 of this title.

(3) On or after July 1, 2021, no new faucet, showerhead, or urinal may be sold or offered for sale, lease, or rent in the State unless the efficiency of the new product meets or exceeds the efficiency standards set forth in the rules adopted pursuant to section 2795 of this title.

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

(A) The compliance date shall be on or after February 1, 2022, unless subdivision (B) of this subdivision (4) applies.

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

(5) The prohibitions set forth in subdivisions (2) through (4) of this subsection shall not apply to a product that the seller or lessor purchased:

(A) in the case of a product listed in subdivision (2) of this

subsection, on or before June 30, 2020;

(B) in the case of a faucet, showerhead, or urinal, on or before
June 30, 2021; and

(C) in the case of a portable air conditioner, before the first date on
which compliance is required under subdivision (4).

* * *

(f)(1) When federal preemption under 42 U.S.C. § 6297 applies to a standard adopted pursuant to this chapter for a product, the standard shall become enforceable on the occurrence of the earliest of the following:

(A) The federal energy or water conservation standard for the product under 42 U.S.C. chapter 77 is withdrawn, repealed, or otherwise voided. However, this subdivision (A) shall not apply to any federal energy or water conservation standard set aside by a court of competent jurisdiction upon the petition of a person who will be adversely affected, as provided in 42 U.S.C. § 6306(b).

(B) A waiver of federal preemption is issued pursuant to 42 U.S.C. § 6297.

(2) The federal standard for general service lamps shall be considered to be withdrawn, repealed, or otherwise voided within the meaning of this subsection if it does not come into effect on January 20, 2020 pursuant to the actions published at 82 Fed. Reg. 7276 and 7333 (January 19, 2017).

(3) When a standard adopted pursuant to this chapter becomes enforceable under this subsection, a person shall not sell or offer for sale in the State a new product subject to the standard unless the efficiency or water conservation of the new product meets or exceeds the requirements set forth in the standard.

Sec. 6. RULEMAKING

On or before May 1, 2019, the Commissioner of Public Service shall file with the Secretary of State proposed rules to implement Secs. 2 through 4 of this act.

Sec. 7. 26 V.S.A. § 2173 is amended to read:

§ 2173. RULES ADOPTED BY THE BOARD

(a) ~~The plumber's examining board~~ Plumber's Examining Board may, pursuant to the ~~provisions of 3 V.S.A. chapter 25 (Administrative Procedure Act)~~ Administrative Procedure Act, make and revise such plumbing rules as necessary for protection of the public health, except that no rule of the ~~board~~ Board may require the installation or maintenance of a water heater at a minimum temperature. To the extent that a rule of the ~~board~~ Board conflicts with this subsection, that rule shall be invalid and unenforceable. The rules shall be in effect in every city, village, and town having a public water system or public sewerage system and apply to all premises connected to the systems and all public buildings containing plumbing or water treatment and heating

specialties whether they are connected to a public water or sewerage system. The local board of health and the ~~commissioner of public safety~~ Commissioner of Public Safety shall each have authority to enforce these rules. The rules shall be limited to minimum performance standards reasonably necessary for the protection of the public against accepted health hazards and shall be consistent with any minimum efficiency standards for plumbing fixtures adopted under 9 V.S.A. chapter 74. The ~~board~~ Board may, if it finds it practicable to do so, adopt the provisions of a nationally recognized plumbing code and as needed shall adopt a Vermont-specific amendment to the adopted code to ensure that it is consistent with any minimum efficiency standards for plumbing fixtures adopted under 9 V.S.A. chapter 74.

* * *

* * * *Energy Planning* * * *

Sec. 8. 30 V.S.A. § 202b is amended to read:

§ 202b. STATE COMPREHENSIVE ENERGY PLAN

(a) The Department of Public Service, in conjunction with other State agencies designated by the Governor, shall prepare a State Comprehensive Energy Plan covering at least a 20-year period. The Plan shall seek to implement the State energy policy set forth in section 202a of this title and shall be consistent with the relevant goals of 24 V.S.A. § 4302. The Plan shall include:

(1) a comprehensive analysis and projections regarding the use, cost,

supply, and environmental effects of all forms of energy resources used within Vermont;

(2) recommendations for State implementation actions, regulation, legislation, and other public and private action to carry out the Comprehensive Energy Plan, including recommendations for State agency energy plans under 3 V.S.A. § 2291 and transportation planning under Title 19; and

(3) recommendations for regional and municipal energy planning and standards for issuing a determination of energy compliance pursuant to 24 V.S.A. § 4352.

* * *

(e) The Commissioner of Public Service (Commissioner) shall file an annual report on progress in meeting the goals of the Plan. The report shall address each of the following sectors of energy consumption in the State: electricity, nonelectric fuels for thermal purposes, and transportation. In preparing the report, the Commissioner shall consult with the Secretaries of Administration, of Agriculture, Food and Markets, of Natural Resources, and of Transportation and the Commissioner of Buildings and General Services.

(1) The Commissioner shall file the report on or before January 15 of each year, commencing in 2019. The provisions of 2 V.S.A. § 20(d) shall not apply to this report.

(2) The Commissioner shall file the report with the House Committees on Energy and Technology and on Natural Resources, Fish, and Wildlife and with the Senate Committees on Finance and on Natural Resources and Energy.

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

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

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

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

(4) The report shall include a supplemental analysis setting forth how progress toward the goals of the Plan is supported by complementary work in

avoiding or reducing energy consumption through efficiency and demand reduction. In this subdivision (4), "demand reduction" includes dispatchable measures, such as controlling appliances that consume energy, and nondispatchable measures, such as weatherization.

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

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

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

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

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

Sec. 9. 30 V.S.A. § 218c is amended to read:

§ 218c. LEAST-COST INTEGRATED PLANNING

* * *

(b) Each regulated electric or gas company shall prepare and implement a

least-cost integrated plan for the provision of energy services to its Vermont customers. At least every third year on a schedule directed by the Public Utility Commission, each such company shall submit a proposed plan to the Department of Public Service and the Public Utility Commission. The Commission, after notice and opportunity for hearing, may approve a company's least-cost integrated plan if it determines that the company's plan complies with the requirements of subdivision (a)(1) of this section and of sections 8004 and 8005 of this title and is consistent with the goals of the Comprehensive Energy Plan issued under section 202b of this title.

* * *

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

§ 10b. STATEMENT OF POLICY; GENERAL

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

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

(2) the need for transportation projects that will improve the State's economic infrastructure, as well as the use of resources in efficient,

coordinated, integrated, cost-effective, and environmentally sound ways, and that will be consistent with the recommendations of the Comprehensive Energy Plan (CEP) issued under 30 V.S.A. § 202b.

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

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

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

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

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

* * *

Sec. 11. 19 V.S.A. § 10i is amended to read:

§ 10i. TRANSPORTATION PLANNING PROCESS

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

** * **

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

(1) ~~Managing~~ managing, maintaining, and improving the state's State's existing transportation infrastructure to provide capacity, safety, and flexibility in the most cost-effective and efficient manner.;

(2) ~~Developing~~ developing an integrated transportation system that provides Vermonters with transportation choices;

(3) ~~Strengthening~~ strengthening the economy, protecting the quality of the natural environment, and improving Vermonters' quality of life; and

(4) achieving the recommendations of the CEP.

* * *

Sec. 12. 3 V.S.A. § 2291 is amended to read:

§ 2291. STATE AGENCY ENERGY PLAN

* * *

(c) The Secretary of Administration with the cooperation of the Commissioners of Public Service and of Buildings and General Services shall develop and oversee the implementation of a State Agency Energy Plan for State government. The Plan shall be adopted by June 30, 2005, modified as necessary, and readopted by the Secretary on or before January 15, 2010 and each sixth year subsequent to 2010. The Plan shall be consistent with the Comprehensive Energy Plan (CEP) issued under 30 V.S.A. § 202b. The Plan shall accomplish the following objectives and requirements:

* * *

Sec. 13. REPORTS; ELECTRIC GENERATION CONSTRAINTS

(a) As used in this section, "SHEI" means the Sheffield-Highgate Export Interface.

(b) This section requires two written submissions on constraints relating to electric generation, one from the Public Utility Commission (PUC or Commission) and one from the Department of Public Service (DPS or Department). Each submission shall be made on or before January 15, 2019 to the House Committee on Energy and Technology and the Senate Committees on Finance and on Natural Resources and Energy.

(c) The Commission has pending before it several contested cases raising issues pertaining to electric generation and the SHEI area and a noncontested case proceeding related to the Standard Offer Program under 30 V.S.A. § 8005a in which the Commission may examine issues related to ensuring that standard offer projects are proposed in areas that do not result in additional costs to the electric transmission or distribution system or that provide the greatest benefit to the system. The Commission's written submission under this section shall include all of the following:

(1) For each of those contested cases, a summary of its findings and conclusions on the merits of the issue or issues in the case related to the SHEI area. This subdivision (1) does not require the Commission to provide a summary for a contested case in which it has not issued a final order on the merits.

(2) For the proceeding related to the Standard Offer Program, a summary of its decisions to date of the submission on issues related to siting standard offer projects in areas that do not result in additional costs to the electric transmission or distribution system or that provide the greatest benefit to the system.

(3) As attachments, a copy of each decision summarized.

(d) The Department shall submit a written report to assist the General Assembly, renewable energy developers, and electric utilities to plan for the deployment of renewable electric generation in a manner that is consistent

with the goals, requirements, and programs related to renewable energy set forth or established in 30 V.S.A. chapter 89, the statutory goals for greenhouse gas reduction at 10 V.S.A. § 578, and the goals and recommendations of the 2016 Comprehensive Energy Plan.

(1) On each of the following, the report shall include analysis and recommendations that are consistent with those goals, requirements, and programs:

(A) How to manage demands on the State's electric transmission and distribution system that relate to or affect the deployment of renewable electric generation. The Department shall identify and review areas of the State, such as the SHEI area, in which generation that is interconnected to the electric transmission and distribution system faces constraints due to system capacity and conditions, including the relationship of interconnected generation to existing load (the identified constrained areas).

(B) How to encourage the deployment of all types of renewable electric generation while minimizing curtailment of such generation.

(C) How to facilitate meeting the distributed renewable generation and energy transformation requirements of the Renewable Energy Standard at 30 V.S.A. §§ 8004–8005 in light of the identified constrained areas.

(D) Whether, until resolution of the constraints in the identified constrained areas, to allocate among all electric distribution utilities in the

State the incremental costs to utilities caused by siting in those areas renewable electric generation that was or is encouraged by or used to meet a current or former program under 30 V.S.A. chapter 89 or that is designed or proposed to achieve a goal or recommendation of the 2016 Comprehensive Energy Plan and, if so, to propose a method for such allocation.

(E) The role of energy storage in the deployment of renewable electric generation.

(F) Recommended methods to guide where renewable electric generation should be located in the State.

(G) Recommended methods to guide the location in the State of end users that consume significant amounts of electric energy.

(H) Other relevant issues as determined by the Department.

(2) Prior to submitting this report, the Department shall provide an opportunity for written submission of relevant comments and information by the public and shall conduct one or more meetings at which the public may provide comments and information. The Department shall provide prior notice of the opportunity to submit comments and information and of each meeting to each Vermont electric transmission and distribution utility, Renewable Energy Vermont, each holder of a certificate of public good for an electric generation facility within the SHEI area with a capacity greater than 500 kilowatts, each entity appointed to deliver energy efficiency programs and measures under

30 V.S.A. § 209(d), and any other person who requests such notice or whom the Department may determine to notify.

(3) With respect to the recommendations in the report, the Department shall identify those recommendations that require passage of enabling legislation and those recommendations that may be carried out under existing law. The report shall propose a timetable for implementation of the recommendations that may be carried out under existing law.

Sec. 14. RENEWABLE ENERGY STANDARD (RES) RULEMAKING

2015 Acts and Resolves No. 56, Sec. 8(d) is amended to read:

(d) On or before July 1, ~~2018~~ 2019, the ~~Board~~ Public Utility Commission shall commence rulemaking to implement Secs. 2, 3, and 7 of this act. The ~~Board~~ Commission shall finally adopt these rules within eight months of commencing rulemaking, unless this period is extended by the Legislative Committee on Administrative Rules under 3 V.S.A. § 843.

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

*Electric Vehicles * * **

Sec. 15. 23 V.S.A. § 1104 is amended to read:

§ 1104. STOPPING PROHIBITED

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

* * *

(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 at an electric vehicle charging station and the vehicle violates the restrictions.

* * *

Sec. 16. 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.

(2) In addition, the Secretary may prescribe special restrictions related to parking of plug-in electric vehicles in designated areas of a State highway facility.

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

Sec. 17. 23 V.S.A. § 1008a is amended to read:

§ 1008a. REGULATION OF MOTOR VEHICLES AT STATE AIRPORTS

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

(2) In addition, the Secretary may prescribe special restrictions related to parking of plug-in electric vehicles in designated areas on such grounds.

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

** * * Effective Dates * * **

Sec. 18. EFFECTIVE DATES

(a) This section and Secs. 13 (reports; electric generation constraints) and 14 (RES rulemaking) shall take effect on passage.

(b) All other sections shall take effect on July 1, 2018.