ESHB 2758 - S COMM AMD

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By Committee on Water, Energy & Telecommunications

- 1 Strike everything after the enacting clause and insert the 2. following:
- "Sec. 1. RCW 19.260.030 and 2006 c 194 s 2 are each amended to 3 4 read as follows:
- 5 (1) This chapter applies to the following types of new products 6 sold, offered for sale, or installed in the state: (a) Automatic 7 commercial ice cube machines; (b) commercial clothes washers; (c) 8 ((commercial prerinse spray valves; (d))) commercial refrigerators and 9 freezers; (((e) metal halide lamp fixtures; (f))) <u>(d)</u> single-voltage external AC to DC power supplies; $((\frac{1}{4}))$ (e) state-regulated 10 11 incandescent reflector lamps; ((and (h))) (f) unit heaters; (q) wine 12 chillers for use by an individual; (h) illumination of remote reach-in cabinets, cabinets without doors, and wine chillers that are not 13 consumer products; (i) hot water dispensers and minitank electric water 14 heaters; (j) bottle-type water dispensers and point-of-use water 15 16 dispensers; (k) pool heaters, residential pool pumps, and portable electric spas; (1) tub spout diverters; and (m) commercial hot food 17 18 holding cabinets. This chapter applies equally to products whether they are sold, offered for sale, or installed as a stand-alone product 19 20 or as a component of another product.
 - (2) This chapter does not apply to (a) new products manufactured in the state and sold outside the state, (b) new products manufactured outside the state and sold at wholesale inside the state for final retail sale and installation outside the state, (c) products installed in mobile manufactured homes at the time of construction, or (d) products designed expressly for installation and use in recreational vehicles.
- 2.8 **Sec. 2.** RCW 19.260.040 and 2006 c 194 s 3 are each amended to read 29 as follows:

The legislature establishes the following minimum efficiency standards for the types of new products set forth in RCW 19.260.030.

(1)(a) Automatic commercial ice cube machines must have daily energy use and daily water use no greater than the applicable values in the following table:

			Maximum	Maximum condenser
		Harvest rate	energy use	water use
Equipment type	Type of cooling	(lbs. ice/24 hrs.)	(kWh/100 lbs.)	(gallons/100 lbs. ice)
Ice-making head	water	<500	7.800055H	200022Н
		>=500<1436	5.580011H	200022Н
		>=1436	4.0	200022Н
Ice-making head	air	450	10.260086Н	Not applicable
		>=450	6.890011H	Not applicable
Remote condensing but	air	<1000	8.850038	Not applicable
not remote compressor		>=1000	5.10	Not applicable
Remote condensing and	air	<934	8.850038H	Not applicable
remote compressor		>=934	5.3	Not applicable
Self-contained models	water	<200	11.400190Н	1910315H
		>=200	7.60	1910315H
Self-contained models	air	<175	18.00469H	Not applicable
		>=175	9.80	Not applicable

Where H= harvest rate in pounds per twenty-four hours which must be reported within 5% of the tested value.

- (b) For purposes of this section, automatic commercial ice cube machines shall be tested in accordance with ARI 810-2003 test method as published by the air-conditioning and refrigeration institute. Ice-making heads include all automatic commercial ice cube machines that are not split system ice makers or self-contained models as defined in ARI 810-2003.
- (2) Commercial clothes washers must have a minimum modified energy factor of 1.26. For the purposes of this section, capacity and modified energy factor are defined and measured in accordance with the current federal test method for clothes washers as found at 10 C.F.R. Sec. 430.23.
 - (3) ((Commercial prerinse spray valves must have a flow rate equal

[&]quot;Maximum water use" applies only to water used for the condenser.

to or less than 1.6 gallons per minute when measured in accordance with the American society for testing and materials: "Standard Test Method for Prerinse Spray Valves," ASTM F2324 03.

(4+))(a) Commercial refrigerators and freezers must meet the applicable requirements listed in the following table:

Equipment Type	Doors	Maximum Daily Energy Consumption (kWh)
Reach-in cabinets, pass-through cabinets,	Solid	0.10V+ 2.04
and roll-in or roll-through cabinets that are	Transparent	0.12V+ 3.34
refrigerators		
Reach-in cabinets, pass-through cabinets,	Transparent	.126V+ 3.51
and roll-in or roll-through cabinets that are		
"pulldown" refrigerators		
Reach-in cabinets, pass-through cabinets,	Solid	0.40V+ 1.38
and roll-in or roll-through cabinets that are	Transparent	0.75V+ 4.10
freezers		
Reach-in cabinets that are refrigerator-	Solid	0.27AV - 0.71
freezers		
with an AV of 5.19 or higher		
	Reach-in cabinets, pass-through cabinets, and roll-in or roll-through cabinets that are refrigerators Reach-in cabinets, pass-through cabinets, and roll-in or roll-through cabinets that are "pulldown" refrigerators Reach-in cabinets, pass-through cabinets, and roll-in or roll-through cabinets that are freezers Reach-in cabinets that are refrigerator-freezers	Reach-in cabinets, pass-through cabinets, and roll-in or roll-through cabinets that are refrigerators Reach-in cabinets, pass-through cabinets, and roll-in or roll-through cabinets that are "pulldown" refrigerators Reach-in cabinets, pass-through cabinets, and roll-in or roll-through cabinets, and roll-in or roll-through cabinets, and roll-in or roll-through cabinets that are freezers Reach-in cabinets that are refrigerator- freezers Solid Transparent Transparent Solid Transparent Solid

17 kWh= kilowatt hours

 $V = \text{total volume } (ft^3)$

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AV= adjusted volume= [1.63 x freezer volume (ft³)]+ refrigerator volume (ft³)

(b) For purposes of this section, "pulldown" designates products designed to take a fully stocked refrigerator with beverages at 90 degrees F and cool those beverages to a stable temperature of 38 degrees F within 12 hours or less. Daily energy consumption shall be accordance with the measured in American national standards institute/American society of heating, refrigerating and airconditioning engineers test method 117-2002, except that the backloading doors of pass-through and roll-through refrigerators and freezers must remain closed throughout the test, and except that the controls of all appliances must be adjusted to obtain the following product temperatures.

31	Product or compartment type	Integrated average product temperature in degrees Fahrenheit
32	Refrigerator	38± 2
33	Freezer	0± 2

- (((5) Metal halide lamp fixtures designed to be operated with lamps rated greater than or equal to 150 watts but less than or equal to 500 watts shall not contain a probe start metal halide lamp ballast.
- $\frac{(6)}{(4)}$ (a) Single-voltage external AC to DC power supplies shall meet the requirements in the following table:

6	Nameplate output	Minimum Efficiency in Active Mode	
7	< 1 Watt	0.49 * Nameplate Output	
8	> or= 1 Watt and < or= 49 Watts	0.09 * Ln (Nameplate Output)+ 0.49	
9	>49 Watts	0.84	
10		Maximum Energy Consumption in No-Load Mode	
11	< 10 Watts	0.5 Watts	
12	> or= 10 Watts and < or= 250 Watts	0.75 Watts	
		i e e e e e e e e e e e e e e e e e e e	

Where Ln (Nameplate Output) - Natural Logarithm of the nameplate output expressed in Watts

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- (b) For the purposes of this section, efficiency of single-voltage external AC to DC power supplies shall be measured in accordance with the United States environmental protection agency's "Test Method for Calculating the Energy Efficiency of Single-Voltage External AC to DC and AC to AC Power Supplies," by Ecos Consulting and Power Electronics Application Center, dated August 11, 2004.
- $((\frac{7}{1}))$ (5)(a) The lamp electrical power input of state-regulated incandescent reflector lamps shall meet the minimum average lamp efficacy requirements for federally regulated incandescent reflector lamps contained in 42 U.S.C. Sec. 6295(i)(l)(A)-(B).
- 24 (b) The following types of incandescent lamps are exempt from these 25 requirements:
- 26 (i) Lamps rated at fifty watts or less of the following types: BR 27 30, ER 30, BR 40, and ER 40;
- 28 (ii) Lamps rated at sixty-five watts of the following types: BR 29 30, BR 40, and ER 40; and
- 30 (iii) R 20 lamps of forty-five watts or less.
- $((\frac{(8)}{(8)}))$ (6) Unit heaters must be equipped with intermittent ignition devices and must have either power venting or an automatic flue damper.
- 34 (7) Wine chillers designed and sold for use by an individual must 35 not exceed the applicable requirements listed in the following table:

1	Equipment Type	Maximum Annual Appliance Energy
2		Consumption (kWh)
3	Wine chillers with manual defrost	13.7V + 267
4	Wine chillers with automatic defrost	17.4V + 344
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6	$V = \text{volume in } ft^3$.	
7	(8) The internal illumination of the	following appliances,
8	manufactured on or after January 1, 2009, sha	all be only by (a) $T-8$
9	fluorescent lamps with electronic ballasts, or	(b) a lighting system
10	that has no fewer lumens per watt than a	system using only T-8
11	fluorescent lamps with electronic ballasts:	
12	(i) Remote reach-in cabinets with tran	nsparent doors, remote
13	pass-through cabinets with transparent doors,	and remote roll-in or
14	roll-through cabinets with transparent doors;	
15	(ii) Cabinets without doors; and	
16	(iii) Wine chillers that are not consumer p	products.
17	(9) The standby energy consumption of bottle	e-type water dispensers,
18	and point-of-use water dispensers, dispensing k	ooth hot and cold water,
19	manufactured on or after January 1, 2009, shall	not exceed 1.2 kWh/day.
20	(10)(a) The standby loss of hot water d	lispensers and minitank
21	electric water heaters manufactured on or after	January 1, 2009, shall
22	be not greater than 35 watts.	
23	(b) This subsection does not apply to any w	water heater:
24	(i) That is within the scope of 42 U.S	.C. Sec. 6292(a)(4) or
25	6311(1)(F);	
26	(ii) That has a rated storage volume of les	ss than 20 gallons; and
27	(iii) For which there is no federal test me	
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29	(11) The following standards are establi	shed for pool heaters,
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31	(a) Natural gas pool heaters shall not be	
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33		ng standards:

(i) Pool pump motors manufactured on or after January 1, 2009, may

not be split-phase or capacitor start -- induction run type.

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(ii) Pool pump motors with a capacity of 1 HP or more which are manufactured on or after January 1, 2009, shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor's maximum rotation rate.

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- (iii) Pool pump motor controls manufactured on or after January 1, 2009, shall have the capability of operating the pool pump at at least two speeds. The default circulation speed shall be the lowest speed, with a high speed override capability being for a temporary period not to exceed one normal cycle.
- 10 (c) The standby power of portable electric spas manufactured on or 11 after January 1, 2009, shall be not greater than $5(V^{2/3})$ watts where V 12 = the total volume, in gallons.
- 13 <u>(12)(a) The leakage rate of tub spout diverters shall be no greater</u> 14 than the applicable requirements shown in the following table:

15			Maximum Leakage Rate
16	Appliance	Testing Conditions	Effective January 1, 2009
17		When new	<u>0.01 gpm</u>
18	Tub spout diverters	After 15,000 cycles of diverting	<u>0.05 gpm</u>

- 19 <u>(b) Showerhead-tub spout diverter combinations shall meet both the</u> 20 <u>standard for showerheads and the standard for tub spout diverters.</u>
- 21 (13) The idle energy rate of commercial hot food holding cabinets 22 manufactured on or after January 1, 2009, shall be no greater than 40 23 watts per cubic foot of measured interior volume.
- 24 Sec. 3. RCW 19.260.050 and 2006 c 194 s 4 are each amended to read 25 as follows:
- (1) No new ((commercial prerinse spray valve,)) commercial clothes 26 27 washer, commercial refrigerator or freezer, state-regulated incandescent reflector lamp, or unit heater manufactured on or after 28 January 1, 2007, may be sold or offered for sale in the state unless 29 the efficiency of the new product meets or exceeds the efficiency 30 31 standards set forth in RCW 19.260.040. No new automatic commercial ice cube machine (()) or single-voltage external AC to DC power supply, 32 ((or metal halide lamp fixtures)) manufactured on or after January 1, 33

- 2008, may be sold or offered for sale in the state unless the 1 2 efficiency of the new product meets or exceeds the efficiency standards 3 set forth in RCW 19.260.040.
- (2) On or after January 1, 2008, no new ((commercial prerinse spray 4 valve,)) commercial clothes washer, commercial refrigerator or freezer, 5 single-voltage external AC to DC power supply, state-regulated 6 incandescent reflector lamp, or unit heater manufactured on or after 7 January 1, 2007, may be installed for compensation in the state unless 8 the efficiency of the new product meets or exceeds the efficiency 9 10 standards set forth in RCW 19.260.040. On or after January 1, 2009, no new automatic commercial ice cube machine ((or metal halide lamp 11 12 fixtures)) manufactured on or after January 1, 2008, may be installed 13 for compensation in the state unless the efficiency of the new product 14 meets or exceeds the efficiency standards set forth in RCW 19.260.040.
 - (3) Standards for ((metal halide lamp fixtures and)) stateregulated incandescent reflector lamps are effective on the dates in subsections (1) and (2) of this section.
 - (4) The following products, if manufactured on or after January 1, 2009, may not be sold or offered in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040:
 - (a) Wine chillers for use by an individual;
- (b) Illumination of remote reach-in cabinets, cabinets without 23 24 doors, and wine chillers that are not consumer products;
 - (c) Hot water dispensers and minitank electric water heaters;
 - (d) Bottle-type water dispensers and point-of-use water dispensers;
- 27 (e) Pool heaters, residential pool pumps, and portable electric 28 spas;
 - (f) Tub spout diverters; and

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- (g) Commercial hot food holding cabinets.
- (5) The following products, if manufactured on or after January 1, 31 2009, may not be installed for compensation in the state on or after 32 January 1, 2010, unless the efficiency of the new product meets or 33 exceeds the efficiency standards set forth in RCW 19.260.040: 34
- 35 (a) Wine chillers for use by an individual;
- (b) Illumination of remote reach-in cabinets, cabinets without 36 37 doors, and wine chillers that are not consumer products;
- (c) Hot water dispensers and minitank electric water heaters; 38

- (d) Bottle-type water dispensers and point-of-use water dispensers; 1
- 2 (e) Pool heaters, residential pool pumps, and portable electric
- 3 <u>sp</u>as;

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- (f) Tub spout diverters; and
- (g) Commercial hot food holding cabinets. 5

6 NEW SECTION. Sec. 4. A new section is added to chapter 19.260 RCW 7 to read as follows:

The energy policy division of the department of community, trade, and economic development shall convene a work group representatives of the consumer electronics industry, energy efficiency organizations, and other state and federal energy efficiency programs, as deemed appropriate, to review and compare energy efficiency standards and coverage of the federal energy star program and standards and coverage adopted by California and Oregon to identify appropriate standards and coverage to be adopted by Washington. The work group shall report its findings and recommendations to appropriate committees of the legislature by December 1, 2008."

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By Committee on Water, Energy & Telecommunications

On page 1, line 1 of the title, after "code;" strike the remainder 18 of the title and insert "amending RCW 19.260.030, 19.260.040, and 19 19.260.050; and adding a new section to chapter 19.260 RCW." 20

EFFECT: Deletes provision directing CTED Energy Policy Division to adopt standards for new consumer audio and video equipment consistent with standards adopted by West Coast states. Directs Energy Policy Division to convene work group with representatives of consumer electronics industry, energy efficiency organizations, and other state and federal energy efficiency programs, as deemed appropriate, to

review and compare federal Energy Star program standards and coverage and California and Oregon standards and coverage to identify appropriate standards and coverage for Washington. Work group will report to Legislature by December 1, 2008.

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