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August 5, 2010

MEMORANDUM

TO: Power Committee

FROM: Tom Eckman

SUBJECT: Consensus Agreement on Residential Appliance Standards

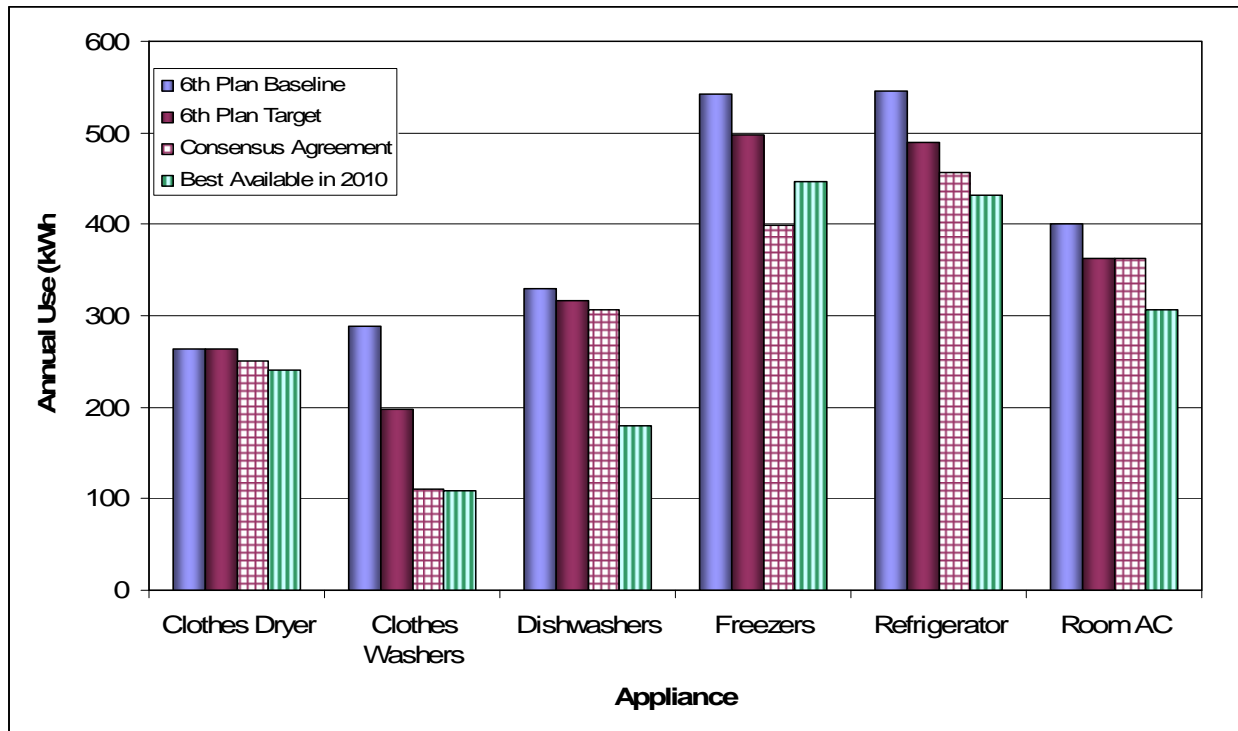
After several months of negotiation, the Association of Home Appliance Manufacturers (AHAM) and efficiency organizations, governmental agencies, including the Council, the California Energy Commission, and utilities coordinated by the American Council for an Energy-Efficient Economy (ACEEE), have agreed to a number of recommendations related to new appliance efficiency standards and test procedures, smart appliances, and incentives to manufacture super-efficient appliances. A copy of this agreement is attached.

There are four elements of this agreement. The first is energy and water efficiency standards. The agreement recommends new federal minimum efficiency standards for residential refrigerator/freezers, clothes washers, clothes dryers, room air-conditioners, and dishwashers. Figure 1 compares the Sixth Plan's baseline and target level of efficiency for each of these appliances to the levels agreed to by the parties to the consensus agreement. In each case, the consensus agreement will exceed or equal the efficiency levels targeted in the Sixth Power Plan.

The consensus agreement recommends to the US Department of Energy (DOE) that these standards take effect on the following schedule:

Refrigerator/Freezers	Jan. 1, 2014
Clothes Washers	Jan. 1, 2015
Clothes Dryers	Jan. 1, 2015
Room Air-Conditioners	Jun. 1, 2014
Dishwashers	Jan. 1, 2013

Figure 1 - Consensus Standards Efficiency Recommendations Compared to 6th Plan Baselines and Target Efficiency Levels



The second element is a series of recommended revisions to the DOE’s test procedures for all of these appliances. This is particularly important for clothes dryers where the recommended revisions to the existing test procedure will by itself improve dryer efficiency by approximately ten percent.

The third element of the agreement is intended to facilitate the production of smart appliances. As part of the agreement, the parties agreed to jointly petition EPA and DOE to provide a 5% credit to the energy performance level required to meet ENERGY STAR eligibility criteria for products that meet an EPA-set definition of “smart appliance.”

The fourth element of the agreement consists of recommendations for updates and extensions of the manufacturer tax credit for the production of super-efficient refrigerators, freezers, clothes washers, and dishwashers. These incentives are intended to encourage manufacturers to develop, commercialize, and sell very high efficiency products, helping to transform markets faster than with standards alone. The lower tiers of the current federal incentives are phased-out under the new agreement and new higher tiers are added. Some of the current incentive levels would become the new minimum standard.

Staff will brief the Power Committee on the basic terms of the agreement. We also hope to be able to provide an estimate of the potential regional savings should these standards be adopted by DOE.

**Agreement on Minimum Federal Efficiency Standards,
Smart Appliances, Federal Incentives and
Related Matters for Specified Appliances**

July 30, 2010

THIS AGREEMENT memorializes the commitments made by the undersigned representatives of the organizations (the “Joint Stakeholders”) regarding joint recommendations for new energy and water conservation standards, test procedures, tax incentives and Energy Star criteria for specified major home appliances. The Joint Stakeholders will jointly submit to the United States Congress and the Administration (including, but not limited to the Department of Energy (DOE) and the Environmental Protection Agency (EPA)) this Agreement and the specific recommendations herein in such form as will facilitate their adoption. The Joint Stakeholders agree to pursue a multi-pronged approach designed to achieve Congressional and regulatory implementation of all the elements contained in the agreement. Any changes to this agreement must be mutually agreed to by the joint Stakeholders.

1. The Joint Stakeholders will jointly submit to Congress and, in good faith, proactively seek enactment of the energy and water conservation standards contained in Attachment I. The Joint Stakeholders will submit to Congress recommended amendments to the Energy Policy and Conservation Act enacting these standards (Attachment II). These amendments include revised standards for refrigerator/freezers, clothes washers, clothes dryers, room air conditioners and dishwashers.
2. Not later than August 1, 2010, the Joint Stakeholders shall submit this agreement to DOE. The Joint Stakeholders shall jointly propose that DOE issue final rules adopting each of the energy conservation standards contained in Attachment I and the amendments presented to Congress and will proactively advocate for DOE adoption of these standards. The Joint Stakeholders agree that the recommended standards address all of the statutory criteria that the Department is required to take into account in promulgating new energy and water conservation standards for the affected products with respect to the specified efficiency criteria.
3. For refrigerators/freezers, clothes washers, room air conditioners and clothes dryers, the Joint Stakeholders shall submit comments to each product’s DOE docket supporting the recommendations. For refrigerator/freezers, such comment shall be filed not later than August 10, 2010; for clothes dryers and room air conditioners, not later than September 10, 2010 and for clothes washers not later than October 31, 2010. In the case of dishwashers (for which no rulemaking is currently underway) not later than September 15, 2010, the Joint Stakeholders shall petition DOE to initiate a rulemaking and to publish a final rule by September 2011.
4. The Joint Stakeholders have made no agreement concerning the appropriate levels for standby or off mode energy consumption and agree that stakeholders will comment to

DOE as they view appropriate during DOE's rulemaking process for each of the affected products, as applicable.

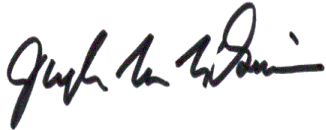
5. The Joint Stakeholders agree that pending amendments to test procedures for the affected products should be completed by DOE, subject to input from all stakeholders and agree to recommend that DOE translate the standards contained in this agreement to equivalent levels specified under revised test procedures.
6. The Joint Stakeholders agree to jointly petition DOE to initiate a rulemaking by January 1, 2012 to be completed by December 31, 2012 to revise the test procedure for refrigerators/freezers to incorporate measured ice maker energy use. The Joint Stakeholders will make good faith efforts to work collaboratively through AHAM's HRF-1 task force to arrive at a joint test procedure recommendation. AHAM will invite the non-manufacturer signers to this agreement to designate a participant for the task force only for the development of this initial test procedure for refrigerators/freezers to incorporate measured ice maker energy use. As part of the petition to be filed, the Joint Stakeholders further agree to petition DOE for rulemaking to incorporate measured ice maker energy use into an amended refrigerator standard to be completed within six months of a revised test procedure incorporating measured ice maker energy use based on the procedure recommended by AHAM's HRF-1 task force and to recommend that this amended standard take effect three years after a final rule is published. This commitment to petition for rulemaking and standards revisions applies whether a specific consensus test procedure is developed by AHAM's HRF-1 task force or not.
7. The Joint Stakeholders agree to submit the letters and attachments recommending certain modifications to the test procedures for refrigerator/freezers, clothes washers and clothes dryers contained in Attachment III, IV and V not later than August 1, 2010. The Joint Stakeholders agree that each party may advocate for any other modifications to the test procedures, provided such modification is not in direct contradiction to the attached recommendations.
8. The Joint Stakeholders will jointly submit to Congress recommendations for extending the existing federal manufacturer tax credits for specified appliances as described in Attachment VI.
9. The Joint Stakeholders will in good faith jointly develop and proactively support the adoption of federal tax credits or other incentives for widespread deployment and effective integration of smart-grid enabled versions of appliances subject to this agreement across the United States.
10. The Joint Stakeholders will jointly petition EPA and DOE no later than September 30, 2010 to provide a 5% credit to the energy performance level required to meet ENERGY STAR eligibility criteria for smart-grid enabled appliances that are subject to this agreement.

11. Any filings, proposals or responses to DOE notices shall be consistent with this Agreement and the parties shall file rulemaking petitions, file comments or take other actions with respect to DOE or other regulatory agencies consistent with this Agreement.
12. The Joint Stakeholders agree to cooperate with each other in the preparation of press releases and public statements in support of this Agreement.
13. The Joint Stakeholders agree to support and cooperate with each other to obtain passage of the legislation described in the Agreement, including advocacy in Congress and to the Administration. The Joint Stakeholders agree to develop and jointly recommend legislative history concerning the recommended amendments.
14. The Joint Stakeholders agree to consult with and obtain consent from all parties before supporting, advocating or agreeing to changes in the legislation. Such consent will not unreasonably be withheld.
15. The Joint Stakeholders agree not to attempt to overturn or revise, or to file or support any legal or legislative challenge to, the recommendations once adopted, whether by Act of Congress or by rule. The Stakeholders agree to support DOE in a manner as each one deems to be reasonable and appropriate in defending any legal, legislative, or administrative challenge to a final rule that adopts the proposed standards. This provision will still apply if DOE, on its own volition, adopts a rule that includes minor deviations from Attachment I. The Joint Stakeholders agree to consult with respect to their responses to any deviation from the recommendations and to make good faith efforts to respond jointly.
16. The Joint Stakeholders agree to implement the commitments made in this Agreement individually or in groups. Each Joint Stakeholder will respond in good faith to reasonable requests by other Joint Stakeholders for joint implementation of any of these commitments.
17. Any additional mutually agreed to changes to this agreement will be provided to Congress and the Administration as necessitated.
18. Nothing in this Agreement is intended to inhibit in any way efforts by individual stakeholders to research, develop, or market products to standards that differ from those contemplated by this Agreement, provided such products are in compliance with applicable laws and regulations.
19. Nothing in this Agreement is intended to direct any technical or product design approach to achieving efficiency standards and the parties shall not take any act to establish any such common approach.
20. This Agreement is hereby agreed to, in counterparts, by the undersigned Joint Stakeholders. This Agreement binds the undersigned Joint Stakeholders, their

employees, their agents, and any successors and will take effect when all signatures are affixed. This agreement applies until December 31, 2012, except clause 15 which applies until December 31, 2013.

Joint Stakeholders

Manufacturers



Joseph McGuire
President
Association of Home Appliance
Manufacturers

Advocates



Steven Nadel
Executive Director
American Council for an Energy
Efficient Economy

On Behalf of –

Members of Major Appliance Division:

*Whirlpool
General Electric
Electrolux
LG Electronics
BSH
Alliance Laundry
Viking Range
Sub-Zero Wolf
Friedrich A/C
U-Line
Samsung
Sharp Electronics
Miele
Heat Controller
AGA Marvel
Brown Stove
Haier
Fagor America
Airwell Group
Arcelik
Fisher & Paykel
Scotsman Ice
Indesit
Kuppersbusch
Kelon
DeLonghi*

*Appliance Standards Awareness Project
Natural Resources Defense Council
Alliance to Save Energy
Alliance for Water Efficiency
Northwest Power and Conservation Council
Northeast Energy Efficiency Partnerships
Consumer Federation of America
National Consumer Law Center*

Attachments

- (I) Recommended energy and water conservation standards
- (II) Recommended legislative amendments
- (III) Recommendations concerning refrigerator test procedures
- (IV) Recommendations concerning clothes washer test procedures
- (V) Recommendations concerning clothes dryer test procedures
- (VI) Recommended legislative amendment for tax incentives

AHAM-ACEEE Multi-Product Standards Agreement

Attachment I

**AHAM-ACEEE Multi-Product Standards Agreement
Refrigerator/Freezer**

Product Class	Product Description	January 1, 2014		
		Change in Standard	Revised Standard Equation	
			Slope	Intercept
Standard size				
Automatic Defrost Refrigerator-Freezers				
3	Top Freezer w/o TTD ice	25%	7.35	207.0
6	Top Freezer w/ TTD ice	25%	7.65	267.0
4	Side Freezer w/o TTD ice	25%	3.68	380.6
7	Side Freezer w/ TTD ice	25%	7.58	304.5
5	Bottom Freezer w/o TTD ice	20%	3.68	367.2
5a/19	Bottom Freezer w/ TTD ice	20%	4.00	431.2
Manual & Partial Automatic Refrigerator-Freezers				
1	Manual Defrost	20%	7.06	198.7
2	Partial Automatic	20%	7.06	198.7
All Refrigerators				
1a	Manual Defrost	20%	7.06	198.7
3a	Automatic Defrost	25%	7.35	207.0
All Freezers				
8	Upright with manual defrost	25%	5.66	193.7
9	Upright with automatic defrost	30%	8.70	228.3
10	Chest with manual defrost	25%	7.41	107.8
10a/20	Chest with automatic defrost	30%	10.33	148.1
Compact Size				
Automatic Defrost Refrigerator-Freezers				
13/15	Top Freezer and Bottom Freezer	15%	10.80	301.8
14	Side Freezer	20%	6.08	400.8
Manual & Partial Automatic Refrigerator-Freezers				
11	Manual Defrost	25%	8.03	224.3
12	Partial Automatic	25%	5.25	298.5
All Refrigerators				
11a	Manual defrost	25%	8.03	224.3
13a	Automatic defrost	25%	9.53	266.3
All Freezers				
16	Upright with manual defrost	10%	8.80	225.7
17	Upright with automatic defrost	10%	10.26	351.9
18	Chest	10%	9.41	136.8
Built-ins				
Automatic Defrost Refrigerator-Freezers				
3B	Top Freezer w/o TTD ice	20%	7.84	220.8
4B	Side Freezer w/o TTD ice	20%	3.93	406.0
7B	Side Freezer w/ TTD ice	20%	8.08	324.8
5B	Bottom Freezer w/o TTD ice	15%	3.91	390.2
5aB	Bottom Freezer w// TTD ice	15%	4.25	458.2
All Refrigerators				
3aB	Automatic Defrost	20%	7.84	220.8
All Freezers				
9B	Upright with automatic defrost	25%	9.32	244.6

**AHAM-ACEEE Multi-Product Standards Agreement
Clothes Washers**

Product Description	Product Class	New Standard Jan. 1, 2015 (MEF/WF)	New Standard Jan. 1, 2018 (MEF/WF)
Top-Loading, Compact (less than 1.6 cubic feet capacity)	1	1.26/14.0	1.81/11.6
Top-Loading, Standard	2	1.72/8.0	2.0/6.0
Front-Loading, Standard	4	2.2/4.5	
Front-Loading, Compact (less than 1.6 cubic feet capacity)	6	1.72/8.0	

**AHAM-ACEEE Multi-Product Standards Agreement
Dryers**

Product Description	Product Class	January 1, 2015	
		Change in Standard	New Standard (EF)
Vented Electric Standard	1	5%	3.17
Vented Electric Compact 120V	2	5%	3.29
Vented Electric Compact 240V	3	5%	3.05
Vented Gas	4	5%	2.81
Vent-less Electric Compact 240V	5	new	2.37
Vent-less Electric Combination Washer/Dryer	6	new	1.95

**AHAM-ACEEE Multi-Product Standards Agreement
Room Air Conditioners**

Product Class	Product Description	June 1, 2014	
		Change in Standard	New Standard (EER)
<i>Without Reverse Cycle w/Louvers</i>			
1	<6,000	15%	11.2
2	6,000 to 7,999	15%	11.2
3	8,000-13,999	12%	11.0
4	14,000 to 19,999	11%	10.8
5	20,000-27,999	11%	9.4
5a	≥28,000	6%	9.0
<i>Without Reverse Cycle w/o Louvers</i>			
6	< 6,000	13%	10.2
7	6,000 to 7,999	13%	10.2
8	8,000-10,999	14%	9.7
8a	11,000-13,999	13%	9.6
9	14,000-19,999	11%	9.4
10	≥20,000	11%	9.4
<i>With Reverse Cycle</i>			
11	< 20,000 w/Louvers	10%	9.9
12	≥ 20,000 w/Louvers	11%	9.4
13	< 14,000 w/o Louvers	11%	9.4
14	≥ 14,000 w/o Louvers	10%	8.8
Casement			
15	Casement Only	10%	9.6
16	Casement-Slider	11%	10.5

**AHAM-ACEEE Multi-Product Standards Agreement
Dishwashers**

Product Description	New Standard Jan. 1, 2013
Standard (≥ 8 place settings plus 6 serving pieces)	307 kWh/year & 5.0 gallons/cycle
Compact (< 8 place settings plus 6 serving pieces)	222 kWh/year & 3.5 gallons/cycle

AHAM-ACEEE Agreement
Attachment II

AHAM Products Statutory Provisions
Resulting from Negotiation
(to be inserted into Energy bill)

Section _____

Measuring Icemaker Energy

Section 323(b) of the Energy Policy and Conservation Act (42 U.S.C. 6293) is amended by adding after the end of paragraph (23) the following:

“(24) Refrigerator/Freezer Test Procedure.—

(A) By January 1, 2011, the Secretary shall finalize the test procedure proposed on May 27, 2010 with such modifications as the Secretary deems appropriate consistent with this Part.

(B) The Secretary shall initiate a rulemaking no later than January 1, 2012 to amend the test procedure only to incorporate measured automatic icemaker energy use and shall publish a final rule by December 31, 2012.

(25) Additional home appliance test procedures. --

(A) By October 1, 2011, the Secretary shall publish a final rule amending the residential clothes washer test procedure.

(B) By April 1, 2011, the Secretary shall finalize the test procedure for clothes dryers proposed on June 29, 2010 with such modifications as the Secretary deems appropriate consistent with this Part.

(C) By April 1, 2011, the Secretary shall finalize the test procedure for room air conditioners proposed on June 29, 2010 with such modifications as the Secretary deems appropriate consistent with this Part.

Section _____

Refrigerator/Freezer Standards

Section 6295(b) of the Energy Policy and Conservation Act (42 U.S.C. 6295) is amended by striking subsection (b)(4) and inserting the following:

“(4) Refrigerators, refrigerator-freezers and freezers manufactured on or after January 1, 2014.

(A)(i) In General – Based on the test procedure in effect on July 9, 2010, the following is the maximum energy use allowed in kilowatt hours per year for the following products (other than refrigerators and refrigerator-freezers with total refrigerated volume exceeding 39 cubic feet

and freezers with total refrigerated volume exceeding 30 cubic feet) manufactured on or after January 1, 2014:

Refrigerator/Freezer Standards Equation	
Product Description	
Automatic Defrost Refrigerator-Freezers	Revised Standard Effective January 1, 2014
Top Freezer w/o TTD ice	7.35 AV+ 207.0
Top Freezer w/ TTD ice	7.65 AV+ 267.0
Side Freezer w/o TTD ice	3.68 AV+ 380.6
Side Freezer w/ TTD ice	7.58 AV+304.5
Bottom Freezer w/o TTD ice	3.68 AV+ 367.2
Bottom Freezer w/ TTD ice	4.0 AV+ 431.2
Manual & Partial Automatic Refrigerator-Freezers	
Manual Defrost	7.06 AV+ 198.7
Partial Automatic	7.06 AV+198.7
All Refrigerators	
Manual Defrost	7.06AV+198.7
Automatic Defrost	7.35 AV+ 207.0
All Freezers	
Upright with manual defrost	5.66 AV+ 193.7
Upright with automatic defrost	8.70 AV+ 228.3
Chest with manual defrost	7.41 AV+ 107.8
Chest with automatic defrost	10.33 AV+ 148.1
Compact Size	
Automatic Defrost Refrigerator-Freezers	
Top Freezer and Bottom Freezer	10.80 AV+ 301.8
Side Freezer	6.08 AV+ 400.8
Manual & Partial Automatic Refrigerator-Freezers	
Manual Defrost	8.03 AV+ 224.3
Partial Automatic	5.25 AV+ 298.5
All Refrigerators	
Manual defrost	8.03 AV+ 224.3
Automatic defrost	9.53 AV+ 266.3
All Freezers	
Upright with manual defrost	8.80 AV+ 225.7
Upright with automatic defrost	10.26 AV+ 351.9
Chest	9.41AV+ 136.8
Built-ins	
Automatic Defrost Refrigerator-Freezers	
Top Freezer w/o TTD ice	7.84 AV+ 220.8
Side Freezer w/o TTD ice	3.93 AV+ 406.0
Side Freezer w/ TTD ice	8.08 AV+ 324.8
Bottom Freezer w/o TTD ice	3.91 AV+ 390.2
Bottom Freezer w// TTD ice	4.25 AV+ 458.2
All Refrigerators	
Automatic Defrost	7.84 AV+ 220.8
All Freezers	
Upright with automatic defrost	9.32 AV+ 244.6

(ii) After publication of each test procedure change pursuant to Section 323(b)(24), the Secretary shall publish final rules amending the standards contained in clause (i) according to the procedures in section 323(e)(2), except that the standards amendment pursuant to the test procedure change required by 323(b)(24)(B) shall be based on the difference between the average measured automatic ice maker energy use of a representative sample for each product class and the value assumed by DOE for ice maker energy use in the test procedure published pursuant to Section 323(b)(24)(A). Section 323(e)(3) shall not apply.

(iii) The Secretary shall publish any final rule required by clause (ii) within six months of enactment of this paragraph or within six months of publication of a final rule amending the test procedure, whichever is later.

(iv) The Secretary may establish new product classes as part of the final amended standard adopted pursuant to the test procedure change required by 323(b)(24)(B) if needed to distinguish among products with automatic icemakers.

(v) An amendment adopted pursuant to a test procedure change required by 323(b)(24)(A) shall apply to products manufactured on or after January 1, 2014. An amendment adopted pursuant to a test procedure change required by 323(b)(24)(B) shall apply to products manufactured on or after a date three years from publication of the final rule amending the standards.

(vi) For refrigerators, freezers and refrigerator-freezers, the Secretary may adjust in a rulemaking the slope and intercept of the equation in clause (i), based on the energy use of typical products of various sizes in a product class, provided that the average energy use for each of these classes is the same under the new equations as under the equations in clause (i). Any final rule with such revisions shall be published no later than July 1, 2011.

(vii) A final rule published under clause (ii) pursuant to the test procedure change required by 323(b)(24)(B) or pursuant to clause (iv) shall not be considered an amendment to the standard for purposes of Section 325(m).

(B) Definition of 'Built-in' product class – refrigerators, freezers and refrigerators with freezer units that are 7.75 cubic feet or greater in total volume and 24 inches or less cabinet depth not including doors, handles and custom front panels; are designed to be totally encased by cabinetry or panels attached during installation; are designed to accept a custom front panel or equipped with an integral factory-finished face; are designed to be securely fastened to adjacent cabinetry, walls or floor; and have sides which are not fully finished and are not intended to be visible after installation.

Section _____

Standards for Clothes Washers

Section 325(g) of the Energy Policy and Conservation Act, (42 U.S.C. 6295(g)) is amended by striking subsection (g)(9)(B) and inserting the following:

(B)(i) Amendment of Standards.

Based on the test procedure in effect on July 9, 2010, clothes washers manufactured on or after January 1, 2015 shall comply with the following minimum modified energy factors (MEF) and maximum water factors (WF):

	For Products Manufactured on and after January 1, 2015	
	MEF	WF
Top Loading-Standard	1.72	8.0
Top Loading – Compact	1.26	14.0
Front Loading-Standard	2.2	4.5
Front Loading-Compact (less than 1.6 cu. ft. capacity)	1.72	8.0

(ii) Based on the test procedure in effect on July 9, 2010, clothes washers manufactured on or after January 1, 2018 shall comply with the following minimum modified energy factors (MEF) and maximum water factors (WF):

	For Products Manufactured on and after January 1, 2018	
	MEF	WF
Top Loading -- Standard	2.0	6.0
Top Loading – Compact	1.81	11.6

(iii) The final rule amending the clothes washer test procedure adopted pursuant to Section 323(b)(25)(A) shall also amend the standards contained in clauses (i) and (ii) according to the procedures in section 323(e)(2). Section 323(e)(3) shall not apply to these amended standards. Amended standards based on clause (i) shall apply to products manufactured on or after January 1, 2015 and amended standards based on clause (ii) shall apply to products manufactured on or after January 1, 2018.

(iv) The Secretary shall integrate standby and off mode energy consumption into the amended MEF standards required pursuant to clause (iii). These amended MEF standards shall reflect levels of standby and off mode energy consumption that meet the criteria under section 325(o).

Section _____ Clothes Dryers

Section 325(g) of the Energy Policy and Conservation Act, (42 U.S.C. 6295(g)) is amended by adding a subsection (g)(4)(D) as follows:

“(D)(i) Based on the test procedure in effect on July 9, 2010 as applicable, clothes dryers manufactured on and after January 1, 2015 shall meet the following minimum energy factors (EF):

Product Description	New Standard (EF)
Vented Electric Standard	3.17
Vented Electric Compact 120V	3.29
Vented Electric Compact 240V	3.05
Vented Gas	2.81
Vent-Less Electric Compact 240V	2.37
Vent-Less Electric Combination Washer/Dryer	1.95

(ii) The final rule amending the clothes dryer test procedure adopted pursuant to Section 323(b)(25)(B) shall also amend the standards contained in clause (i) according to the procedures in section 323(e)(2), except that for the purposes of establishing a representative sample of products, DOE shall choose a sample of minimally compliant dryers which automatically terminate the drying cycle at no less than 4% remaining moisture content. Section 323(e)(3) shall not apply to these amended standards. The amended standards shall apply to products manufactured on or after January 1, 2015.

(iii) The Secretary shall integrate standby and off mode energy consumption into the amended EF standards required pursuant to clause (ii). These amended EF standards shall reflect levels of standby and off mode energy consumption that meet the criteria under section 325(o).

Section _____

Room Air Conditioner Standards - Section 325(c) of the Energy Policy and Conservation Act, (42 U.S.C. 6295(c)) is amended by adding subsection (c)(3) as follows:

“(3) (A)(i) Based on the test procedure in effect on July 9, 2010 as applicable, the minimum energy efficiency ratio of room air conditioners manufactured on and after June 1, 2014 shall be as follows:

Product Description	PROPOSAL (June 1, 2014) New Standard EER
Without Reverse Cycle w/Louvers	
<6,000	11.2
6,000 to 7,999	11.2
8,000-13,999	11.0
14,000 to 19,999	10.8
20,000-27,999	9.4
≥28,000	9.0
Without Reverse Cycle w/o Louvers	
<6,000	10.2
6,000 to 7,999	10.2
8,000-10,999	9.7
11,000-13,999	9.6
14,000 to 19,999	9.4
≥20,000	9.4
With Reverse Cycle	
<20,000 w/Louvers	9.9
≥ 20,000 w/Louvers	9.4
<14,000 w/o Louvers	9.4
≥ 14,000 w/o Louvers	8.8

Casement	
Casement Only	9.6
Casement-Slider	10.5

(ii) The final rule amending the room air conditioner test procedure adopted pursuant to Section 323(b)(25)(C) shall also amend the standards contained in clause (i) according to the procedures in section 323(e)(2). Section 323(e)(3) shall not apply to these amended standards. The amended standards shall apply to products manufactured on or after June 1, 2014.

(iii) The Secretary shall integrate standby and off mode energy consumption into the amended EER standards required pursuant to clause (ii). These amended EER standards shall reflect levels of standby and off mode energy consumption that meet the criteria under section 325(o).

Section_ Dishwashers

Section 325(g)(10) of The Energy Policy and Conservation Act (42 U.S.C. 6295(g)(10)) is amended by striking subparagraph (A), by redesignating subparagraph (B) as subparagraph (D), and by inserting the following before redesignated subparagraph (D):

- (A) A dishwasher manufactured on or after January 1, 2010 shall—
 - (i) for a standard size dishwasher not exceed 355 kWh/year and 6.5 gallons per cycle; and
 - (ii) for a compact size dishwasher not exceed 260 kWh/year and 4.5 gallons per cycle.

- (B) a dishwasher manufactured on or after January 1, 2013 shall—
 - (i) for a standard size dishwasher not exceed 307 kwh/year and 5.0 gallons per cycle; and
 - (ii) for a compact size dishwasher not exceed 222 kwh/year and 3.5 gallons per cycle.

- (C) Any final rule amending the dishwasher test procedure after July 9, 2010, and before January 1, 2013 shall also amend the standards contained in subparagraph (B) according to the procedures in section 323(e)(2). Section 323(e)(3) shall not apply to these amended standards. The amended standards shall apply to products manufactured on and after January 1, 2013.

Section__. Energy Star

Section 324a of the Energy Policy and Conservation Act (42 USC 6294a) is amended by adding a new subsection _ as follows:

“ () Credit for Smart Appliances

Not later than 180 days after enactment, the Administrator and the Secretary shall determine whether to update the Energy Star criteria for residential refrigerators/freezers, dishwashers, clothes washers, clothes dryers, and room air conditioners in order to incorporate smart grid and demand response features, after soliciting comments under paragraph (c)(5)." [of EPCA 324A]



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July 20, 2010

The Honorable Catherine R. Zoi
Assistant Secretary
Office of Energy Efficiency and Renewable Energy
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Dear Assistant Secretary Zoi:

The Association of Home Appliance Manufacturers (AHAM) and efficiency organizations, which are being coordinated by the American Council for an Energy-Efficient Economy (ACEEE), have agreed to a set of recommendations that should be addressed as the Department of Energy modifies the test procedure for refrigerator/freezers.

Please find these recommendations attached, and we look forward to working with your office as the test procedure rulemaking progresses.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kevin Messner".

Kevin Messner
Vice President, Government Relations
AHAM

A handwritten signature in blue ink, appearing to read "Steven M. Nadel".

Steven Nadel
Executive Director
ACEEE

cc: Kathleen Hogan, Deputy Assistant Secretary for Energy Efficiency
Roland Risser, Program Manager for Building Technologies

Refrigerator/Freezer Test Procedure Changes

Recommendations

1. We are committed to working with DOE to develop a test procedure for icemaker energy use.
2. DOE should include a placeholder value for icemaker energy use as proposed (75 FR 29847) until a test procedure for icemaker energy use is established, but this placeholder should only be an interim step.
3. DOE should initiate a rulemaking no later than January 1, 2012 (and preferably earlier) to amend the test procedures to incorporate measured icemaker energy use. DOE should publish a final rule for amended test procedures by December 31, 2012 (and preferably earlier). By July 1, 2013, DOE should publish a final rule amending energy conservation standards to adjust the standard levels for any difference between the placeholder value as proposed (75 FR 29847) and the average energy use of a representative sample of icemakers by product class as measured under the amended test procedure and in accordance with the new compartment temperatures that will become effective on January 1, 2014. The effective date of the amended standards would be three years after publication of the final rule. (Note: We have also included this recommendation in proposed legislative language.)
4. As part of the icemaker test procedure development, DOE should collect field data on energy use and ice production for different types of icemakers (e.g., automatic and manual), assuring a nationally representative sampling.
5. DOE should join, and fund NIST's participation in, the task force set up by AHAM and other interested parties to incorporate automatic icemaker energy use into the refrigerator/freezer test procedure.



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July 20, 2010

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Assistant Secretary
Office of Energy Efficiency and Renewable Energy
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Dear Assistant Secretary Zoi:

The Association of Home Appliance Manufacturers (AHAM) and efficiency organizations, which are being coordinated by the American Council for an Energy-Efficient Economy (ACEEE), have agreed to a set of recommendations that should be addressed as the Department of Energy modifies the test procedure for clothes washers.

Please find these recommendations attached, and we look forward to working with your office as the test procedure rulemaking progresses.

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Steven Nadel
Executive Director
ACEEE

cc: Kathleen Hogan, Deputy Assistant Secretary for Energy Efficiency
Roland Risser, Program Manager for Building Technologies

Clothes Washer Test Procedure Changes

Principles

Before finalizing a revised test procedure for residential clothes washers, the Department should:

- Gather or develop information on contemporary laundry practices in the US, including temperature settings, average cycles per year, special purpose machine cycles*, the size of a minimum laundry load, the size of an average load, and the frequency distribution of various laundry loads (load adjustment factor) for incorporation into the test procedure.
- Ensure that the test procedure does not contain any unwarranted bias in favor of large capacity washers.
- Extend Table 5.1 (Test Load Sizes) to a basket size of 6.0 ft³ (specific edits will be provided).
- Incorporate AHAM test cloth changes to improve the reproducibility (specific edits will be provided).

All of the above mentioned items shall be developed through DOE's current residential clothes washer test procedure rulemaking, to be completed by October 1, 2011, and applicable to the 2015 standard.

*Special purpose machine cycles include so-called "steam" cycles and periodic manufacturer-recommended non-laundry cycles for cleaning or deodorizing the laundry drum.



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Dear Assistant Secretary Zoi:

The Association of Home Appliance Manufacturers (AHAM) and efficiency organizations, which are being coordinated by the American Council for an Energy-Efficient Economy (ACEEE), have agreed to a set of recommendations that should be addressed as the Department of Energy modifies the test procedure for clothes dryers.

Please find these recommendations attached, and we look forward to working with your office as the test procedure rulemaking progresses.

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Kevin Messner
Vice President, Government Relations
AHAM

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Steven Nadel
Executive Director
ACEEE

cc: Kathleen Hogan, Deputy Assistant Secretary for Energy Efficiency
Roland Risser, Program Manager for Building Technologies

Clothes Dryer Test Procedure Changes Recommendations

1. DOE should update the initial RMC, from the current assumption of 70%, based on the best available data (ideally based on a nationally representative sample).
2. DOE should update the number of dryer cycles/year, from the current assumption of 416 cycles/year, based on the best available data (ideally based on a nationally representative sample).
3. DOE should update the size of the dryer test load, from the current test load of 7 lbs, based on best available data (ideally based on a nationally representative sample).
4. DOE should modify the test procedure to address the effectiveness of automatic termination controls (e.g. moisture sensor and temperature sensor controls).
5. DOE should create a ventless dryer (including ventless combination washer/dryer) test procedure to inform a baseline energy consumption level for this new product category.
6. Revise Section 1.11 of 10 CFR 430 Subpart B, Appendix D to more clearly account for electronic controls. “. . . mark, **visual indicator** or detent which indicates a preferred...”
7. Correct Section 3.1 of 10 CFR 430 Subpart B, Appendix D to “. . . prevent deflection of the ~~dryer drum surface~~ . . .”

Schedule: All of the above-mentioned items shall be developed through DOE's current clothes dryers test procedure rulemaking, to be completed by April 1, 2011, and applicable to the 2015 standard.

AHAM-ACEEE Agreement
Attachment VI

H.R. xxxx

A bill to modify and extend the tax credit applicable to energy efficient appliances and other matters

Sec. 1. Modify and extend the energy efficient appliance credit.

(a) Modification and extension of rules applicable to dishwashers.-- Paragraph (b)(1) of section 45M is amended by striking “and” at the end of subparagraph (A); by striking “.” and inserting “;” in subparagraph (B); and adding the following subparagraphs:

“(C) \$25 in the case of a dishwasher which is manufactured in calendar year 2011 and which uses no more than 307 kilowatt hours per year and 5.0 gallons per cycle (5.5 gallons per cycle for dishwashers designed for greater than 12 place settings),

“(D) \$50 in the case of a dishwasher which is manufactured in calendar year 2011, 2012, or 2013 and which uses no more than 295 kilowatt hours per year and 4.25 gallons per cycle (4.75 gallons per cycle for dishwashers designed for greater than 12 place settings), and

“(E) \$75 in the case of a dishwasher which is manufactured in calendar year 2011, 2012, or 2013 and which uses no more than 280 kilowatt hours per year and 4.0 gallons per cycle (4.5 gallons per cycle for dishwashers designed for greater than 12 place settings).”

(b) Modification and extension of rules applicable to clothes washers.--Paragraph (b)(2) of section 45M is amended striking “and” at the end of subparagraph (C); by striking “.” and inserting “;” in subparagraph (D); and by adding the following subparagraphs:

“(E) \$175 in the case of a top-loading clothes washer manufactured in calendar year 2011 and which meets or exceeds a 2.2 modified energy factor and does not exceed a 4.5 water consumption factor,

“(F) \$200 in the case of a top-loading clothes washer manufactured in calendar year 2011, 2012, or 2013 and which meets or exceeds a 2.4 modified energy factor and does not exceed a 4.2 water consumption factor, and

“(G) \$250 in the case of a residential or commercial clothes washer manufactured in calendar year 2011, 2012, or 2013 which meets or exceeds a 2.8 modified energy factor and does not exceed a 3.5 water consumption factor.”

(c) Modification and extension of rules applicable to refrigerators.--Paragraph (b)(3) of section 45M is amended by striking “and” at the end of subparagraph (C); by striking “.” and inserting “;” in subparagraph (D); and by adding the following subparagraphs:

“(E) \$150 in the case of a refrigerator manufactured in calendar year 2011, 2012, or 2013 and which consumes at least 30 percent less energy than the 2001 energy conservation standards, and

“(F) \$200 in the case of a refrigerator manufactured in calendar year 2011, 2012, or 2013 and which consumes at least 35 percent less energy than the 2001 energy conservation standards.”

(d) Modification of rules to include freezers.

(1) In general.--Subsection (b) of section 45M is amended by adding the following paragraph:

“(4) Freezers. The applicable amount is--

“(A)(i) \$150 in the case of an automatic defrost freezer manufactured in calendar year 2011 or 2012 (other than a freezer described in subparagraph (B)) and which consumes at least 30 percent less energy than the 2001 energy conservation standards,

(ii) \$150 in the case of a manual defrost freezer manufactured in calendar year 2011 or 2012 (other than a freezer described in subparagraph (B)) and which consumes at least 25 percent less energy than the 2001 energy conservation standards, and

“(B)(i) \$200 in the case of an automatic defrost freezer manufactured in calendar year 2011, 2012, or 2013 and which consumes at least 40 percent less energy than the 2001 energy conservation standards.

(ii) \$200 in the case of a manual defrost freezer manufactured in calendar year 2011, 2012, or 2013 and which consumes at least 35 percent less energy than the 2001 energy conservation standards”

(2) Definition.-- Subsection (f) of section 45M is amended by adding the following paragraphs:

“(11) Freezer. The term “freezer” means a residential model freezer which has an internal volume of at least 16.5 cubic feet.”

(e) Aggregate credit amount allowed.

(1) In general.-- Paragraph (e)(1) of section 45M is amended by striking “\$75,000,000” and inserting “\$100,000,000” and by adding “For the period of all prior taxable years beginning after December 31, 2007 and ending before January

1, 2011, the preceding sentence shall be applied by substituting ‘\$75,000,000’ for ‘\$100,000,000’.”

(2) Exclusion of certain appliances.--Paragraph (e)(2) of section 45M is amended to read as follows:

“(2) Amount allowed for certain refrigerators and clothes washers. Refrigerators described in subsection (b)(3)(D) and clothes washers described in subsection (b)(2)(D) shall not be taken into account with respect to the \$75,000,000 limitation described in paragraph (1). Dishwashers described in subsection (b)(1)(E), clothes washers described in subsection (b)(2)(F) and (b)(2)(G), refrigerators described in subsection (b)(3)(F), and freezers described in subsection (b)(4)(B), shall not be taken into account with respect to the \$100,000,000 limitation described in paragraph (1).”

(3) Gross receipts limitation.—Paragraph (e)(3) of section 45M is amended by adding at the end the following sentence: “For taxable years beginning after December 31, 2010, the preceding sentence shall be applied by substituting ‘4 percent’ for ‘2 percent’.”

Sec. 2. Direct payment of energy efficient appliances tax credit.--In the case of any taxable year which includes the last day of calendar year 2011 or calendar year 2012, a taxpayer who elects to waive the credit which would otherwise be determined with respect to the taxpayer under section 45M of the Internal Revenue Code of 1986 for such taxable year shall be treated as making a payment against the tax imposed under subtitle A of such Code for such taxable year in an amount equal to 85 percent of the amount of the credit which would otherwise be so determined. Such payment shall be treated as made on the later of the due date of the return of such tax or the date on which such return is filed. Elections under this section may be made separately for 2011 and 2012, but once made shall be irrevocable. No amount shall be includible in gross income or alternative minimum taxable income by reason of this section.

Sec. 3. Effective date.--The provisions of this section shall apply to qualified energy efficient appliances produced after December 31, 2010.

Briefing on Consensus Agreement on Residential Appliance Standards

August 12, 2010



Summary of Agreement (1)

- Who are the parties to the agreement?
 - Appliance Manufacturers represented by Association of Home Appliance Manufacturers (AHAM) including: GE, Whirlpool, LG, Sanyo, etc.
 - Energy Efficiency Interest, including the American Council for an Energy Efficient Economy (ACEEE), Natural Resources Defense Council (NRDC), Consumer Federation of America (CFA), California Energy Commission (CEC), Northeast Energy Efficiency Partnership (NEEP and the Northwest Power and Conservation Council



Summary of Agreement (2)

- To What Did They Agree?
 - Revised standards
 - Revised test procedures
 - Tax incentives for high efficiency appliances
 - “Smart Grid” consideration in future Energy Star appliance specifications

slide 3



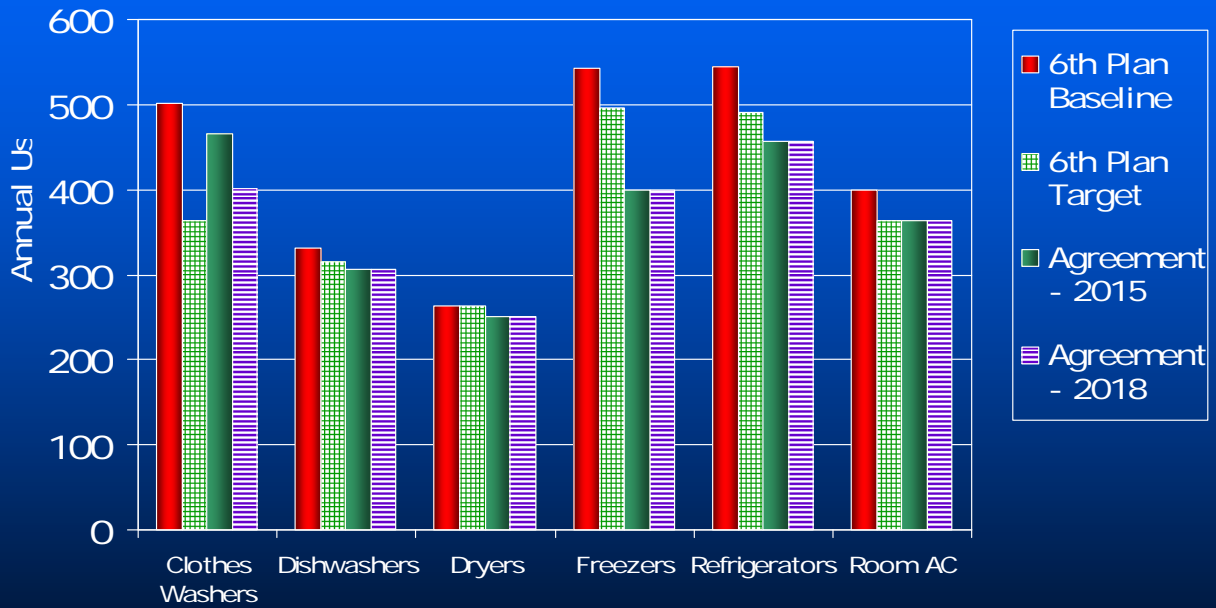
Summary of Agreement (3)

- What Appliances Are Covered by the Agreement?
 - Dishwashers
 - » New Standards & Revised Test Procedure
 - » Effective Jan. 1, 2013
 - Refrigerators & Freezers
 - » New Standards & Revised Test Procedure
 - » Effective Jan. 1, 2014
 - Room Air Conditioners
 - » New Standards
 - » Effective June 1, 2014
 - Clothes Washers & Dryers
 - » New Standards & Revised Test Procedure
 - » Effective Jan. 1, 2015

slide 4



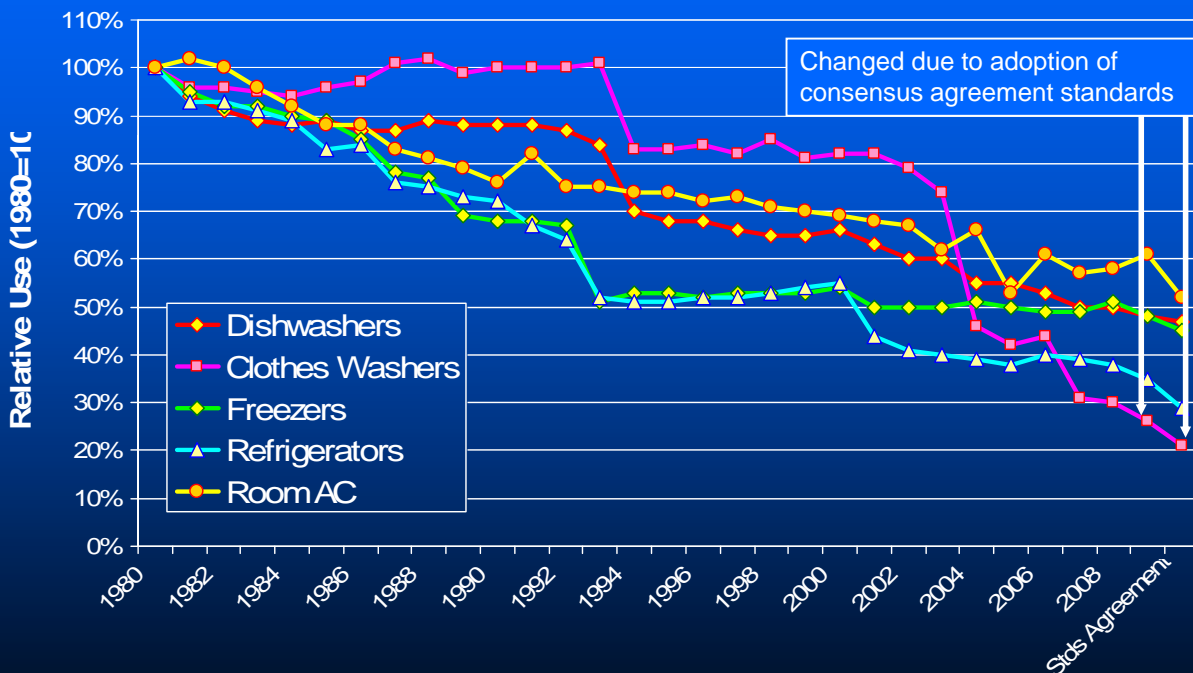
Impact on Individual Appliances



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Consensus Agreement Impact on Residential Appliance Efficiency Trends



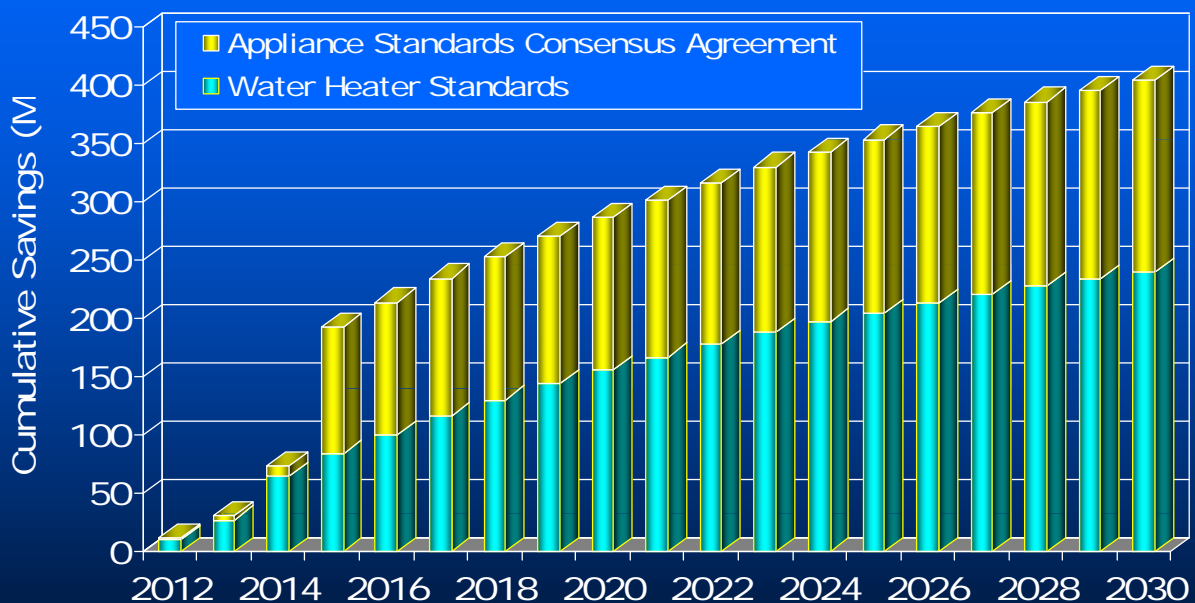
Estimated Regional Savings

Appliance	Savings by 2030 (aMW)
Room AC	4
Refrigerator	20
Freezer	25
Dryer	8
Clothes Washer (Machine & Dryer Energy)	3
Clothes Washer & Dishwasher (Hot Water Heating Energy)	104
Total	164

slide 7



Estimated Cumulative Savings of Standards



Note: Federal Standard for Water Heaters is final. Consensus agreement on appliance standards has been recommend to DOE but no final action has been taken.

slide 8

