keep records of the placement of traps, trap visits, trap counts, and treatments for each registered place of production and make the records available to APHIS upon request.

(2) All apricots for export from continental Spain to the United States must be treated for *C. capitata* in accordance with part 305 of this chapter.

(h) *Post-harvest procedures.* The apricots must be safeguarded by a pest-proof screen, plastic tarpaulin, or by some other pest-proof barrier while in transit to the packinghouse and while awaiting packing. They must be packed within 24 hours of harvest into pest-proof cartons or containers or covered with pest-proof mesh or a plastic tarpaulin for transport to the United States. These safeguards must remain intact until arrival of the consignment in the United States.

(i) *Packinghouse requirements.* Packing of apricots for export to the United States must be conducted within a packinghouse registered and approved by the NPPO of Spain. Packinghouses in which apricots are packed for export to the United States must be able to exclude quarantine pests. All openings to the outside of the packinghouse must be covered by screening with openings of not more than 1.6 mm or by some other barrier that prevents pests from entering. The packinghouse must have double self-closing doors at the entrance to the facility and at the interior entrance to the area where the apricots are to be packed. During the time the packinghouse is used to pack and export apricot fruit to the United States, the packinghouse must only accept fruit from places of production registered and approved by the NPPO of Spain.

(j) *Phytosanitary inspection.* (1) A biometric sample of apricot fruit jointly agreed upon by APHIS and the NPPO of Spain must be inspected in Spain by the NPPO of Spain following post-harvest processing. The sample must be visually inspected for the quarantine pests *A. erythrostoma, C. funebrana,* and *M. fructigena.* A portion of the fruit must be cut open and inspected for *C. capitata.* If any of these quarantine pests are found, the entire consignment of apricot fruit will be prohibited from importation into the United States.

(2) Fruit presented for inspection at a U.S. port of entry must be identified in the shipping documents accompanying each lot of fruit that specify the place of production in which the fruit was produced and the packinghouse in which the fruit was processed. This identification must be maintained until the fruit is released for entry into the United States.

(k) *Phytosanitary certificate.* Each consignment of apricot fruit must be accompanied by a phytosanitary certificate issued by the NPPO of Spain that states that the fruit has been treated for *C. capitata* in accordance with 7 CFR part 305 and includes an additional declaration that the fruit in the consignment was inspected and found free from *A. erythrostoma, C. capitata, C. funebrana,* and *M. fructigena.*

Done in Washington, DC, this 25th day of January 2013.

Kevin Shea,

Acting Administrator, Animal and Plant Health Inspection Service.

[FR Doc. 2013–02021 Filed 1–29–13; 8:45 am]

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DEPARTMENT OF ENERGY

10 CFR Part 430

[Docket No. EERE–2012–BT–TP–0013]

RIN 1904–AC71

Energy Conservation Program: Test Procedures for Conventional Cooking Products With Induction Heating Technology

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of proposed rulemaking; public meeting.

SUMMARY: The U.S. Department of Energy (DOE) proposes to revise its test procedures for cooking products established under the Energy Policy and Conservation Act. Test procedures for cooking products can be found at DOE's regulations for Energy Conservation Program for Consumer Products, subpart B, appendix I (Appendix I). The proposed amendments to Appendix I would amend the test method for measuring the energy efficiency of induction cooking tops and ranges. Appendix I does not currently include any test methods applicable to induction cooking products. The proposed amendments would incorporate induction cooking tops by amending the definition of ''conventional cooking top'' to include induction heating technology. Furthermore, the proposed amendments would require for cooking tops the use of test equipment compatible with induction technology as well as with gas burners and electric resistance heating elements. Specifically, the amendments would replace the solid aluminum test blocks currently specified in the test procedure for cooking tops with hybrid test blocks comprising two separate pieces: an aluminum body and a stainless steel base. Appendix I currently specifies the test block size for electric cooking tops based on the surface unit diameter; however, there are no provisions for determining which test block size to use for non-circular electric surface units. The proposed amendments include a clarification that the test block size be determined using the smallest dimension of the electric surface unit.

DATES: DOE will accept comments, data, and information regarding this notice of proposed rulemaking (NOPR) before and after the public meeting, but no later than April 15, 2013. See section V, ''Public Participation,'' for details.

DOE will hold a public meeting on Monday, March 4, 2013, from 9 a.m. to 4 p.m., in Washington, DC. The meeting will also be broadcast as a Webinar. See section V, ''Public Participation,'' for Webinar registration information, participant instructions, and information about the capabilities available to Webinar participants.

ADDRESSES: The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 8E–089, 1000 Independence Avenue SW., Washington, DC 20585. To attend, please notify Ms. Brenda Edwards at (202) 586–2945. Persons can attend the public meeting via Webinar. For more information, refer to the Public Participation section near the end of this notice.

Comments: Comments may be submitted using any of the following methods:

1. *Federal eRulemaking Portal: http://www.regulations.gov*. Follow the instructions for submitting comments.

2. *Email: Induction-Cooking-Prod-2012–TP–0013@ee.doe.gov* Include the docket number and/or RIN in the subject line of the message.

3. *Mail:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, Mailstop EE–2J, 1000 Independence Avenue SW., Washington, DC 20585–0121. If possible, please submit all items on a CD. It is not necessary to include printed copies.

4. *Hand Delivery/Courier:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, 950 L'Enfant Plaza SW., Suite 600, Washington, DC 20024. Telephone: (202) 586–2945. If possible, please submit all items on a CD. It is not necessary to include printed copies.

For detailed instructions on submitting comments and additional information on the rulemaking process, see section V of this document (Public Participation).

Docket: The docket is available for review at *regulations.gov*, including **Federal Register** notices, framework documents, public meeting attendee lists and transcripts, comments, and other supporting documents/materials. All documents in the docket are listed in the *regulations.gov* index. However, not all documents listed in the index may be publicly available, such as information that is exempt from public disclosure.

A link to the docket Web page can be found at: *http://www.regulations.gov/#!docketDetail;dct=FR+PR+N+O+SR+PSrpp=50;so=DESC;sb=postedDate;po=0;D=EERE–2012-BT-TP-0013*. This Web page will contain a link to the docket for this notice on the regulations.gov site. The regulations.gov Web page will contain simple instructions on how to access all documents, including public comments, in the docket. See section V for information on how to submit comments through *regulations.gov.*

For further information on how to submit a comment, review other public comments and the docket, or participate in the public meeting, contact Ms. Brenda Edwards at (202) 586–2945 or by email: *Brenda.Edwards@ee.doe.gov.*

FOR FURTHER INFORMATION CONTACT:

Ms. Ashley Armstrong, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, EE–2J, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 586–6590. Email: *Ashley.Armstrong@ee.doe.gov.*

Mr. Ari Altman, U.S. Department of Energy, Office of the General Counsel, GC–71, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 202–287–6307. Email: *Ari.Altman@hq.doe.gov*.

SUPPLEMENTARY INFORMATION:

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I. Authority and Background

Title III of the Energy Policy and Conservation Act (42 U.S.C. 6291, *et seq.;* ''EPCA'' or, ''the Act'') sets forth a variety of provisions designed to improve energy efficiency. (All references to EPCA refer to the statute as amended through the Energy Independence and Security Act of 2007 (EISA 2007), Public Law 110–140 (Dec. 19, 2007)). Part B of title III, which for editorial reasons was redesignated as Part A upon incorporation into the U.S. Code (42 U.S.C. 6291–6309), establishes the ''Energy Conservation Program for Consumer Products Other Than Automobiles.'' These include residential kitchen ranges and ovens, the subject of today's notice of proposed rulemaking (NOPR). (42 U.S.C. 6292(a)(10))

Under EPCA, this program consists essentially of four parts: (1) Testing, (2) labeling, (3) Federal energy conservation standards, and (4) certification and enforcement procedures. The testing requirements consist of test procedures that manufacturers of covered products must use (1) as the basis for certifying to DOE that their products comply with the applicable energy conservation standards adopted under EPCA, and (2) for making representations about the efficiency of those products. Similarly, DOE must use these test requirements to determine whether the products comply with any relevant standards promulgated under EPCA.

A. General Test Procedure Rulemaking Process

Under 42 U.S.C. 6293, EPCA sets forth the criteria and procedures DOE must follow when prescribing or amending test procedures for covered products. EPCA provides in relevant part that any test procedures prescribed or amended under this section shall be reasonably designed to produce test results which measure energy efficiency, energy use or estimated annual operating cost of a covered product during a representative average use cycle or period of use and shall not be unduly burdensome to conduct. (42 U.S.C. 6293(b)(3))

In addition, if DOE determines that a test procedure amendment is warranted, it must publish proposed test procedures and offer the public an opportunity to present oral and written comments. . (42 U.S.C. 6293(b)(2)) Finally, in any rulemaking to amend a test procedure, DOE must determine to what extent, if any, the proposed test procedure would alter the measured energy efficiency of any covered product as determined under the existing test procedure. (42 U.S.C. 6293(e)(1)) If DOE determines that the amended test procedure would alter the measured efficiency of a covered product, DOE must amend the applicable energy conservation standard accordingly. (42 U.S.C. 6293(e)(2))

B. Test Procedures for Cooking Products

DOE's test procedures for conventional ranges, conventional cooking tops, conventional ovens, and microwave ovens are codified at appendix I to subpart B of Title 10 of the Code of Federal Regulations (CFR) (Appendix I).

DOE established the test procedures in a final rule published in the **Federal Register** on May 10, 1978. 43 FR 20108, 20120–28. These test procedures did not cover induction cooking products because they were, at the time, relatively new products, and represented a small share of the market. 43 FR 20117. DOE revised its test procedures for cooking products to more accurately measure their efficiency and energy use, and published the revisions as a final rule in 1997. 62 FR 51976 (Oct. 3, 1997). These test procedure amendments did not address induction cooking, but included: (1) A reduction in the annual useful cooking energy; (2) a reduction in the number of self-cleaning oven cycles per year; and (3) incorporation of portions of International Electrotechnical Commission (IEC) Standard 705–1988, ''Methods for measuring the performance of microwave ovens for

household and similar purposes,'' and Amendment 2–1993 for the testing of microwave ovens. *Id.* The test procedures for conventional cooking products establish provisions for determining estimated annual operating cost, cooking efficiency (defined as the ratio of cooking energy output to cooking energy input), and energy factor (defined as the ratio of annual useful cooking energy output to total annual energy input). 10 CFR 430.23(i); Appendix I. These provisions for conventional cooking products are not currently used for compliance with any energy conservation standards because the present standards only regulate design requirements, nor is there an EnergyGuide [1] labeling program for cooking products.

DOE recently conducted a separate rulemaking to address standby and off mode energy consumption, as well as certain active mode testing provisions, for residential dishwashers, dehumidifiers, and conventional cooking products. DOE published a final rule on October 31, 2012 (77 FR 65942, hereafter referred to as the October 2012 Final Rule), adopting standby and off mode provisions that satisfy the EISA 2007 amendments to EPCA, which require DOE to include measures of standby mode and off mode energy consumption in its test procedures for residential products, if technically feasible. (42 U.S.C. 6295(gg)(2)(A))

II. Summary of the Notice of Proposed Rulemaking

In today's NOPR, DOE proposes amendments to the test procedures in Appendix I that would allow for testing the active mode energy consumption of induction cooking products; *i.e.,* conventional cooking tops and ranges equipped with induction heating technology for one or more surface units on the cooking top.[2] The term surface unit refers to burners for gas cooking tops, electric resistance heating elements for electric cooking tops, and inductive heating elements for induction cooking tops. Under the proposed amendments, which would amend the definition of ''conventional cooking top'' to include products with induction heating, induction cooking products would be tested according to the same test procedures as conventional cooking products.

The current test method for conventional cooking tops (which is also used for the cooking top portion of conventional ranges) involves heating a solid aluminum test block on each surface unit of the cooking top. The cooking top cooking efficiency is determined by averaging the efficiencies of all surface units on the cooking top. The proposed test procedure would replace the aluminum test blocks currently specified for conventional cooking top testing with hybrid test blocks comprising two separate stacked pieces: a stainless steel alloy 430 base, which is compatible with the induction technology, and an aluminum body. The proposed hybrid test blocks would have the same outer diameters and heat capacities as the existing aluminum test blocks.

DOE considered other potential test blocks, including blocks made entirely of carbon steel alloy 1018, and hybrid blocks with carbon steel bases, but found the results using those blocks to be less repeatable than for the hybrid blocks with stainless steel alloy 430 bases. DOE also considered an alternate test method based on heating water. While this method may better represent actual consumer use, DOE is not proposing a water-heating test procedure due to concerns regarding repeatability, and to maintain consistency with the existing test procedure for conventional cooking tops and ranges.

In today's NOPR, DOE further proposes methodology to determine the required test block size for all electric surface units, including those that are non-circular.

III. Discussion

A. Products Covered by This Test Procedure Rulemaking

As discussed in section I of this NOPR, the test procedures currently in Appendix I do not apply to induction cooking products. Induction products were not considered in the initial final rule to establish these test procedures because of their relatively small market share in 1978. 43 FR 20117. Today's proposal would amend the DOE test procedures for conventional cooking tops and ranges to cover induction cooking products.

Although induction cooking products started as a niche product with a very small market share, a recent survey of major retailers indicates that roughly 10 percent of all cooking tops currently available on the market now use induction heating. Additionally, the three manufacturers comprising more than 84 percent of the market for conventional ranges [3] each offer multiple induction cooking products. Given the increased availability of induction cooking products, DOE believes these products now warrant inclusion in the Appendix I test procedures to allow for consideration in future rulemaking analyses.

Induction cooking products use an oscillating magnetic field, produced by alternating current through a coil under the cooking top surface, to generate (''induce'') current in the cooking vessel. The current in turn creates heat in the cooking vessel due to the electrical resistance of the metal, and the heat is transferred to the food load by means of conduction and convection. In order for the current to be induced and the induction technology to function properly, the cooking vessel must be made of a ferromagnetic material, such as steel or iron.

As discussed further in section III.C of this NOPR, the amendments proposed in today's notice would apply to conventional cooking products in general, including induction cooking products. DOE currently defines ''cooking products'' as the major household cooking appliances that cook or heat food by gas, electricity, or microwave energy, and include conventional ranges, conventional cooking tops, conventional ovens, microwave ovens, microwave/conventional ranges and other cooking products. 10 CFR 430.2. A ''conventional cooking top'' contains one or more surface units which include either a gas flame or electric resistance heating. *Id.* A ''conventional range'' consists of a conventional cooking top and one or more conventional ovens. *Id.*

The current definition of ''conventional cooking top,'' and by extension, the definition of ''conventional range,'' does not refer to heating by means of electricity other than electric resistance heating, which would preclude induction heating. Because of the increased availability of induction cooking products discussed in the beginning of this section, DOE is proposing to amend the definition of ''conventional cooking top'' to a household cooking appliance within a class of kitchen ranges and ovens, each of which consists of a horizontal surface containing one or more surface units that utilize a gas flame, electric resistance heating, or electric inductive heating. The definition of ''conventional range'' would remain unchanged, but

[1] For more information on the EnergyGuide labeling program, see: *www.access.gpo.gov/nara/cfr/waisidx_00/16cfr305_00.html.*

[2] DOE is not aware of any residential conventional ovens that use induction heating technology that are available on the market in the United States.

[3] GE, Whirlpool, and Electrolux, as reported in ''U.S. Appliance Industry: Market Share, Life Expectancy & Replacement Market, and Saturation Levels''. *Appliance Magazine Market Research Report,* January 2010.

would newly cover products with a conventional oven and a cooking top that heats by means of induction technology.

Appendix I also includes a definition of ''active mode,'' which references production of heat by means of a gas flame, electric resistance heating, or microwave energy. 10 CFR part 430, subpart B, appendix I. As with the definition of ''conventional cooking top,'' this definition does not cover induction cooking products. DOE proposes to revise the definition of ''active mode'' to a mode in which a conventional cooking top, conventional oven, conventional range, or microwave oven is connected to a mains power source, has been activated, and is performing the main function of producing heat by means of a gas flame, electric resistance heating, electric inductive heating, or microwave energy. The definition would include the current clarification that delay start mode is a one-off user-initiated short duration function that is associated with an active mode. This definition would be consistent with the proposed definition of ''conventional cooking top.''

DOE requests comment on the proposed amended definitions of conventional cooking top and active mode.

B. Effective Date

The amended test procedure would become effective 30 days after any test procedure final rule is published in the **Federal Register**. The amendments would require that as of 180 days after publication of any test procedure final rule, representations related to the energy consumption of conventional cooking products, including induction cooking products, must be based upon results generated under the applicable provisions of the amended test procedures in Appendix I. (42 U.S.C. 6293(c)(2))

C. Active Mode Test Procedure

The current test procedure for conventional cooking tops involves heating an aluminum test block on each surface unit of the cooking top. Two aluminum test blocks, of different diameters, are specified for testing different surface units. The small test block (6.25 inches diameter) is used for electric surface units with diameters of 7 inches or less, and the large test block (9 inches diameter) is used for electric surface units with diameters greater than 7 inches and all gas surface units. Once the initial test and ambient conditions are met, the surface unit is turned to its maximum energy input setting. After the test block temperature increases by 144 °F, the surface unit is immediately reduced to 25 percent ± 5 percent of the maximum energy input rate for 15 ± 0.1 minutes. The efficiency of the surface unit is calculated as the ratio of the energy transferred to the test block (based on its temperature rise) to the energy consumed by the cooking top during the test. The cooking top cooking efficiency is calculated as the average efficiency of the surface units on the cooking top.

As discussed in section III.A of today's NOPR, induction cooking products are only compatible with ferromagnetic cooking vessels because their high magnetic permeability concentrates the induced current near the surface of the metal, increasing resistance and thus heating. Aluminum is not a ferromagnetic metal—its lower magnetic permeability allows the magnetic field to penetrate further into the material so that the induced current flows with little resistance, and thus does not heat up when it encounters an oscillating magnetic field. Therefore, the aluminum test blocks, currently required by Appendix I, are not appropriate for testing induction cooking products.

DOE conducted testing to investigate potential substitute test blocks for testing induction cooking products. DOE conducted tests on three conventional and three induction cooking tops to determine what effects, if any, the different types of test blocks would have on the test-to-test repeatability and final efficiency results. The test sample included conventional cooking tops to allow for a comparison between the substitute test blocks and the current aluminum test blocks.

DOE considered three possible substitute test blocks: carbon steel, carbon steel hybrid, and stainless steel hybrid. Table III.1 describes the construction of the current aluminum test blocks and the three substitute test blocks.

TABLE III.1—TEST BLOCK COMPOSITION DESCRIPTIONS

Test block classification	Test block composition *(component and material)*
Aluminum	One solid aluminum alloy 6061 block.
Carbon Steel	One solid carbon steel alloy 1018 block.
Carbon Steel Hybrid	Carbon steel alloy 1018 base + Aluminum alloy 6061 body.
Stainless Steel Hybrid	Stainless steel alloy 430 base + Aluminum alloy 6061 body.

The diameters and heat capacities of the aluminum test blocks currently specified in Appendix I reflect consumer cooking behavior. DOE is not aware of information indicating cooking behavior has changed. Therefore, each substitute test block was constructed with the same diameter as the current aluminum test blocks (6.25 inches for small and 9 inches for large). Additionally, DOE varied the heights of the substitute test blocks to match the heat capacities of the current aluminum blocks. For the hybrid test blocks, DOE set the thickness of the steel bases at 0.25 inches to be thin enough to represent the thickness of a typical pot or pan while still being thick enough to prevent warping. DOE set the height of the aluminum body in the hybrid test blocks so the overall heat capacity (the sum of the steel base heat capacity and the aluminum body heat capacity) matched that of the current aluminum test blocks.

DOE proposes in today's NOPR to maintain the test method of heating the test blocks, but to substitute the current aluminum test blocks with the stainless steel hybrid test blocks described above for testing all cooking tops covered by the proposed definition of conventional cooking top (*i.e.,* gas flame, electric resistance heating, and electric inductive heating). Sections III.C.1 through III.C.4 below compare the test results for the different potential test blocks and discuss the rationale for selecting the stainless steel hybrid test block as the substitute.

DOE also conducted tests to heat water in cooking vessels to compare test repeatability with the metal block heating tests. Heating water would allow for a test procedure that is more representative of actual consumer usage (in terms of the cooking food load), but would also introduce additional sources

of variability. Section III.C.5 below describes the water-heating tests.

1. Aluminum Test Blocks

DOE conducted tests using the current aluminum test blocks to establish a baseline for comparison to the candidate substitute test blocks. Appendix I provides specifications for the large and small aluminum test blocks as shown in Table III.2.

TABLE III.2—ALUMINUM TEST BLOCK SPECIFICATIONS

Test block size	Block diameter (inches (in))	Block height (in)	Block weight (pounds (lb))	Specific heat (British thermal units (Btu)/(lb-°F))	Heat capacity (Btu/°F)
Small	6.25 ± 0.05	2.8	8.5 ± 0.1	0.23	1.96
Large	9 ± 0.05	3	19 ± 0.1	0.23	4.37

Because aluminum is not compatible with induction cooking, DOE only tested the aluminum blocks on the three conventional cooking tops (2 electric and 1 gas cooking tops), in the test sample. The small test block was used for electric surface units with diameters of 7 inches or less. The large test block was used for electric surface units with diameters greater than 7 inches and all gas surface units, as required by Appendix I.

DOE did not test every surface unit on each cooking top in the test sample because most cooking tops include multiple surface units of equal diameter and power rating. Prior investigative testing showed that surface units with equal diameters and power ratings on the same cooking top have similar performance. In these cases, DOE tested only one of the identical surface units to limit the total number of tests.

Cooking Top A has electric resistance heating in open coils, Cooking Top B has electric resistance heating under a smooth ceramic surface, and Cooking Top C has gas-flame burners. Table III.3 summarizes the test results using the aluminum blocks for surface units on these products. The surface unit numbers included in Table III.3 are used to differentiate between surface units on the same cooking top. The values listed for each surface unit summarize the data from five tests, except where noted.

TABLE III.3—ALUMINUM TEST BLOCK RESULTS

Test block size	Cooking top	Heating technology	Surface unit	Mean efficiency %	Standard deviation %	95-percent confidence interval (±) %
Large	A	Electric Coil	1	71.03	2.22	2.76
	B	Electric Smooth	1	54.22	0.64	0.80
			2	65.19	1.06	1.32
	C	Gas	1	[a] [b] 18.96	[a] 1.01	[a] 1.60
Small	A	Electric Coil	2	65.04	2.73	3.39
	B	Electric Smooth	3	61.70	0.73	0.90

[a] Values describe data for four tests, not five. In addition, cooking efficiencies for gas burners are typically lower than for electric resistance heating elements.

[b] Results lower than expected due to a meter error, but consistently low from test-to-test.

As shown in Table III.3, a set of five tests using the aluminum test block on the surface units with electric resistance or gas flame heating produced standard deviations of less than 3 percent for each surface unit. These standard deviations correspond to 95-percent confidence intervals within 4 percent of the mean efficiency.

DOE is aware that the mean efficiency listed for the gas surface unit is lower than expected. Typically, gas surface units have efficiencies at or above 40 percent. The lower-than-expected efficiency suggests the magnitudes of the gas consumption for these tests as measured by the meter are likely higher than the actual consumption. The surface unit tested on Cooking Top C has a maximum energy output rating of 9,200 Btu per hour. However, the measured gas use for each test was consistently about 55 percent greater than the maximum rating at the maximum energy input rate setting, suggesting the meter overstated the gas consumption.

Although the meter readings affected the magnitude of the gas surface unit efficiency results, DOE believes the results still provide meaningful information for assessing the candidate test blocks. The purpose of the testing was to compare the testing results, in terms of repeatability and overall efficiency, across the different test block types, and not necessarily to compare efficiencies from unit-to-unit. DOE observed the same low efficiencies and high gas consumptions in the tests on the substitute test blocks described in sections III.C.2 though III.C.5 of this NOPR, so the results for the gas cooking top can still be compared between the different test blocks. The high meter readings do not allow a consistent comparison of the gas surface unit efficiency to the electric surface units, but gas surface units typically have efficiencies in a lower range compared to electric surface units.

2. Carbon Steel Test Blocks

DOE conducted tests using solid carbon steel test blocks with the specifications shown in Table III.4, matching the aluminum test blocks in diameter and heat capacity.

TABLE III.4—CARBON STEEL TEST BLOCK SPECIFICATIONS

Test block size	Block diameter (in)	Block height (in)	Block weight (lb)	Specific heat (Btu/lb-°F)	Heat capacity (Btu/°F)
Small	6.25	1.93	16.85	0.116	1.96
Large	9	2.09	37.67	0.116	4.37

DOE tested the carbon steel blocks on all six cooking tops in the test sample, comprising the three conventional cooking tops discussed in section III.C.1 and three induction cooking tops. Cooking Tops D and E are built-in induction cooking tops, and Cooking Top F is a portable, single-element induction cooking top. Table III.5 summarizes the test results using the carbon steel test blocks for surface units on these products. As described in section III.C.1, DOE did not test multiple surface units with equal diameters on the same cooking top, and the surface unit numbers included in the table are used to differentiate between surface units on the same cooking top.

TABLE III.5—CARBON STEEL TEST BLOCK RESULTS

Test block size	Cooking top	Heating technology	Surface unit	Mean efficiency %	Standard deviation %	95-percent confidence interval (±) %
Large	A	Electric Coil	1	69.79	1.59	1.97
	B	Electric Smooth	1	53.19	1.28	1.60
			2	63.24	2.03	2.52
	C	Gas	1	[a] [b] 18.67	[a] 0.92	[a] 1.46
	D	Induction	1	63.92	2.30	2.86
	E	Induction	1	67.78	0.68	0.84
	F	Induction	1	67.93	0.56	0.70
Small	A	Electric Coil	2	64.61	0.54	0.67
	B	Electric Smooth	3	60.44	1.55	1.93
	D	Induction	2	64.10	1.04	1.29
			3	60.89	2.70	3.35
	E	Induction	2	62.86	1.08	1.34

[a] Values describe data for four tests, not five. In addition, cooking efficiencies for gas burners are typically lower than for electric resistance heating elements.
[b] Results lower than expected due to a meter error, but consistently low from test-to-test.

The results in Table III.5 for carbon steel test blocks are comparable to the test results for the aluminum test blocks presented in Table III.3. The mean efficiencies for the carbon steel blocks were slightly lower than the aluminum test blocks on each surface unit for the conventional cooking tops (Cooking Tops A, B, and C), but the means of the two test block types still fell within the 95-percent confidence intervals for each surface unit. The carbon steel blocks produced results that were just as repeatable as the aluminum test blocks, with standard deviations less than 3 percent for all surface units, and 95-percent confidence intervals all within 4 percent of the mean efficiency.

Based on these test results, DOE concludes that the carbon steel test blocks are a reasonable substitute for the aluminum test blocks. However, the heating that occurs using a solid block of ferromagnetic material may not be representative of how induction cooking tops actually operate in real-world situations. Typically, induction cooking tops only induce current in a thin layer of ferromagnetic material in the cooking vessel, which then heats up the food load. For this reason, DOE conducted further investigations with hybrid test blocks, as discussed below.

3. Carbon Steel Hybrid Test Blocks

DOE conducted additional tests using hybrid test blocks to more closely reflect the real-world operation of induction cooking tops. DOE fabricated carbon steel hybrid test blocks using a 0.25 inch base of carbon steel 1018 with a body of aluminum 6061. Typical cookware is slightly thinner gauge than this base, but DOE chose the base to preclude against warping while the block heats up. Additionally, DOE observed that the portable induction unit is packaged with a steel plate adaptor of roughly the same thickness as DOE's carbon steel base to allow for cooking with non-ferromagnetic cookware.

Table III.6 provides the component and overall properties of the carbon steel hybrid test blocks. DOE varied the height of the aluminum bodies so the overall heat capacities of the hybrid blocks would match the solid aluminum test blocks described in section III.C.1.

TABLE III.6—CARBON STEEL HYBRID TEST BLOCK SPECIFICATIONS

Test block size	Block diameter (in)	Block height (in)	Block weight (lb)	Specific heat (Btu/lb-°F)	Heat capacity (Btu/°F)
Small Carbon Steel Base	6.25	0.25	2.06	0.116	0.24
Small Aluminum Body	6.25	2.5	7.46	0.23	1.72
Small Total	6.25	2.75	9.52	0.21	1.96
Large Carbon Steel Base	9	0.25	4.27	0.116	0.5
Large Aluminum Body	9	2.72	16.85	0.23	3.87

TABLE III.6—CARBON STEEL HYBRID TEST BLOCK SPECIFICATIONS—Continued

Test block size	Block diameter (in)	Block height (in)	Block weight (lb)	Specific heat (Btu/lb-°F)	Heat capacity (Btu/°F)
Large Total	9	2.97	21.12	0.21	4.37

DOE tested the carbon steel hybrid test blocks on all six cooking tops in the test sample. Table III.7 summarizes the test results using the carbon steel hybrid test blocks for surface units on these products. As described in section III.C.1, DOE did not test multiple surface units with equal diameters on the same cooking top, and the surface unit numbers included in the table are used to differentiate between surface units on the same cooking top.

TABLE III.7—CARBON STEEL HYBRID TEST BLOCK RESULTS

Test block size	Cooking top	Heating technology	Surface unit	Mean efficiency %	Standard deviation %	95-Percent confidence interval (±) %
Large	A	Electric Coil	1	67.78	1.87	2.32
	B	Electric Smooth	1	52.03	0.78	0.97
			2	63.59	0.64	0.79
	C	Gas	1	[a] [b] 18.64	[a] 0.59	[a] 0.93
	D	Induction	1	65.94	2.68	3.32
	E	Induction	1	68.17	1.06	1.31
	F	Induction	1	60.10	3.21	3.99
	A	Electric Coil	2	64.44	1.87	2.32
	B	Electric Smooth	3	59.71	1.06	1.32
Small	D	Induction	2	63.26	0.79	0.98
			3	62.88	0.65	0.81
	E	Induction	2	63.27	1.19	1.48

[a] Values describe data for four tests, not five. In addition, cooking efficiencies for gas burners are typically lower than for electric resistance heating elements.
[b] Results lower than expected due to a meter error, but consistently low from test-to-test.

The carbon steel hybrid test block results in Table III.7 are similar to both the aluminum and carbon steel test block results presented in Table III.3 and Table III.5. The efficiencies for the conventional cooking tops are slightly lower than with the aluminum test blocks, and also slightly lower than with the carbon steel test blocks, but within the 95-percent confidence intervals. However, it is not clear what effect the hybrid blocks have on the efficiencies for the induction cooking tops. Five of the six induction surface units have efficiencies nearly equal to or slightly higher than with the single carbon steel test blocks. However, the efficiency for surface unit on Cooking Top F dropped by more than 7 percent.

In addition, after conducting multiple tests using the carbon steel hybrid test blocks, DOE observed rust forming on the carbon steel base. DOE was concerned that the rust could lead to inconsistent heat transfer between the carbon steel base and the aluminum body based on the amount of rust present, which would affect thermal contact.[4] Thus, DOE conducted another set of tests using hybrid test blocks with stainless steel 430 bases that would be more resistant to rust formation.

4.Stainless Steel Hybrid Test Blocks

The specific heats and densities of carbon steel and stainless steel are similar, so bases with the same dimensions have similar heat capacities. Therefore, the same aluminum test bodies were used for both sets of hybrid block tests. Table III.8 describes the component and overall properties of the stainless steel hybrid test blocks.

TABLE III.8—STAINLESS STEEL HYBRID TEST BLOCK SPECIFICATIONS

Test block size	Block diameter (in)	Block height (in)	Block weight (lb)	Specific heat (Btu/lb-°F)	Heat capacity (Btu/°F)
Small Stainless Steel Base	6.25	0.25	2.15	0.11	0.24
Small Aluminum Body	6.25	2.5	7.46	0.23	1.72
Small Total	6.25	2.75	9.61	0.2	1.96
Large Stainless Steel Base	9	0.25	4.28	0.11	0.47
Large Aluminum Body	9	2.72	16.85	0.23	3.87
Large Total	9	2.97	21.13	0.21	4.34

DOE tested the stainless steel hybrid test blocks on all six cooking tops in the test sample. Table III.9 summarizes the test results for surface units on these products using the stainless steel hybrid test blocks. As described in section III.C.1, DOE did not test multiple surface units with equal diameters on the same cooking top, and the surface

[4] Rust also formed on the solid carbon steel test blocks, which could affect heat transfer and repeatability. These issues would likely be more significant for the carbon steel hybrid test blocks due to the additional heat transfer surface between the base and the test block.

unit numbers included in the table are used to differentiate between surface units on the same cooking top.

TABLE III.9—STAINLESS STEEL HYBRID TEST BLOCK RESULTS

Test block size	Cooking top	Heating technology	Surface unit	Mean efficiency %	Standard deviation %	95-Percent confidence interval (±) %
Large	A	Electric Coil	1	64.52	0.87	1.08
	B	Electric Smooth	1	49.19	0.46	0.57
			2	59.60	0.46	0.57
	C	Gas	1	[a b] 16.27	[a] 1.16	[a] 1.85
	D	Induction	1	64.19	1.28	1.59
	E	Induction	1	64.32	0.91	1.13
	F	Induction	1	55.57	1.47	1.83
Small	A	Electric Coil	2	62.87	2.36	2.93
	B	Electric Smooth	3	57.75	0.87	1.08
	D	Induction	2	62.83	1.47	1.83
			3	60.29	0.68	0.84
	E	Induction	2	61.81	1.19	1.47

[a] Values describe data for four tests, not five. In addition, cooking efficiencies for gas burners are typically lower than for electric resistance heating elements.
[b] Results lower than expected due to a meter error, but consistently low from test-to-test.

The stainless steel hybrid test block efficiency results in Table III.9 are on average 2.5 percentage points lower than those for the carbon steel hybrid test blocks shown in Table III.7. However, the standard deviations and 95-percent confidence intervals are less than for the aluminum test blocks, the carbon steel test blocks, and the carbon steel hybrid test blocks, as shown in Table III.10.

TABLE III.10—TEST BLOCK COMPARISON

Test block type	Average efficiency %	Average standard deviation %	Average 95-percent confidence interval (±) %
Aluminum	[a] 56.02	[a] 1.40	[a] 1.80
Carbon Steel	59.78	1.36	1.71
Carbon Steel Hybrid	59.15	1.36	1.71
Stainless Steel Hybrid	56.60	1.10	1.40

[a] Values describe data for electric resistance and gas flame surface units only. For comparison, the average efficiencies for the carbon steel, carbon steel hybrid, and stainless steel hybrid blocks on these surface units are 54.99 percent, 54.36 percent, and 51.70 percent respectively.

Because the stainless steel hybrid test blocks produce the most repeatable results from test-to-test, DOE is proposing that these test blocks be required for testing induction cooking tops. DOE is also proposing to amend the existing cooking tops test procedure to incorporate the stainless steel hybrid blocks for cooking tops with gas flame or electric resistance heating. This would ensure consistency in results among all products covered by the proposed definition of conventional cooking tops. DOE notes that, although the efficiency results using the stainless steel hybrid test blocks for the cooking tops with gas flame or electric resistance heating are on average 4.3 percentage points lower than for the aluminum test blocks, the relative efficiencies among the various surface units remain generally unchanged.

DOE seeks comment on its proposal to require the use of stainless steel hybrid test blocks for testing all cooking tops that would be covered by the proposed definition of conventional cooking tops in an amended cooking products test procedure, including the potential burden associated with the requirement for such new test equipment.

5.Water-Heating Tests

To investigate additional test methods that may be representative of actual consumer usage, DOE conducted a test series based on water heating in place of metal block heating. Water provides a heating medium that is more representative of actual consumer use, because many foods cooked on a cooking top have a relatively high liquid content. However, water heating introduces additional sources of variability not present for metal block heating—the temperature distribution in the water is not always uniform, the properties of the water can vary from lab to lab, and the ambient conditions and cookware surface effects can have a large impact on the water boiling and evaporating throughout the test.

DOE is aware of a draft cooking products test method based on water heating that is under development by the International Electrotechnical Commission (IEC). A draft amendment to IEC Standard 60350–2 Edition 1.0 ''Household electric cooking appliances—Part 2: Hobs—Method for measuring performance'' (Draft IEC 60350 Amendment) specifies heating the water to a certain temperature at the maximum energy input setting, and then turning the unit to a lower energy input setting for an extended simmering period.

The Draft IEC 60350 Amendment specifies the quantity of water to be heated in a standardized cooking vessel whose size is based on the diameter of the surface unit. For this analysis, DOE chose the two IEC-specified cooking vessels with diameters closest to the diameters specified for the aluminum test blocks (6.25 inches and 9 inches). The cookware consists of a thin-walled stainless steel cylinder attached to a flat

stainless steel 430 base plate. The test method also specifies an aluminum lid with vent holes and a small center hole to fix the thermocouple in the center of the pot. Table III.11 describes the IEC cookware and the quantity of water used for DOE's testing.[5]

TABLE III.11—IEC COOKWARE AND WATER SPECIFICATIONS

Cookware size	Cookware diameter (in)	Base thickness (in)	Total height (in)	Lid diameter (in)	Water weight (lbs)
Small	5.91	0.24	4.92	6.5	2.27
Large	9.45	0.24	4.92	10.43	5.95

The Draft IEC 60350 Amendment specifies testing at the maximum energy input rate until a calculated turndown temperature is reached, at which point the energy input rate is reduced to a setting that will maintain the water temperature above 194 °F (a simmering temperature), but as close to 194 °F as possible without additional adjustment of the low-power setting. The test ends 20 minutes after the temperature increases above 194 °F. The turndown temperature is calculated based on an initial test to determine the number of degrees that the temperature continues to rise after turning the unit off from the maximum energy input setting. Energy consumption is measured throughout the entire test, and the final metric describes the energy in Watt-hours (Wh) per 1000 grams (g) of water necessary to reach and maintain the simmering temperature.

DOE observed during some tests that the water approached boiling even at 194 °F, and a significant amount of the water evaporated or boiled off for all of the tests. Additionally, the simmering water temperatures varied from test-to-test even at the same reduced setting. The test method only requires that the simmering temperature stay above 194 °F for a valid test. Certain tests would produce simmering temperatures around 196 °F, close to the 194 °F goal, while others would rise above 200 °F at the same setting. Both tests would be deemed valid under the method in the Draft IEC 60350 Amendment method, but the normalized energy use results would vary because the 200 °F test would use significantly more energy.

To address this concern, DOE developed additional calculations to estimate the efficiency of the water-heating process. The calculations factor in the total temperature rise of the water to account for differences in simmering temperatures, and the total amount of water lost to boiling or evaporation during the test. DOE's method entails measuring the mass of the cookware plus water at the start and end of the test. Table III.12 shows the water-heating efficiency results using the DOE calculation method.

TABLE III.12—WATER-HEATING EFFICIENCY TEST RESULTS

Cookware size	Cooking top	Heating technology	Surface unit	Mean efficiency %	Standard deviation %	95-percent confidence interval (±) %
Large	A	Electric Coil	1	79.81	1.66	2.06
	B	Electric	1	61.81	2.83	3.52
		Smooth	2	75.88	3.11	3.86
	C	Gas	1	[a] [b] 26.29	[a] 2.83	[a] 4.51
	D	Induction	1	81.31	0.28	0.34
	E	Induction	1	79.21	0.65	0.81
	F	Induction	1	74.17	2.55	3.17
Small	A	Electric Coil	2	76.99	1.65	2.05
	B	Electric	3	68.09	4.12	5.11
		Smooth				
	D	Induction	2	79.35	0.37	0.46
			3	80.67	1.71	2.13
	E	Induction	2	75.99	2.03	2.52

[a] Values describe data for four tests, not five. In addition, cooking efficiencies for gas burners are typically lower than for electric resistance heating elements.

[b] Results lower than expected due to a meter error, but consistently low from test-to-test.

Even after considering differences in the final water temperature and the amount of water boiled or evaporated during the test, the variability for the water-heating tests was still greater than for the metal block tests. Table III.13 compares the standard deviations for each surface unit tested with both the water-heating and metal block-heating tests.

[5] Section 7.1.Z2 of the Draft IEC 60350 Amendment, ''Cookware and water amount'', specifies the general construction of the cookware, and Table Z3, ''Sizes of standardized cookware and water amounts'', specifies the dimensions of the cookware and quantity of water based on the diameter or the surface unit under test.

TABLE III.13—OVERALL RESULTS COMPARISON—COEFFICIENT OF VARIATION

Test block size	Cooking top	Heating technology	Surface unit	Standard deviation				
				Aluminum %	Carbon steel %	Carbon steel hybrid %	Stainless steel hybrid %	Water-heating efficiency %
Large	A	Electric Coil	1	2.22	1.59	1.87	0.87	1.66
	B	Electric	1	0.64	1.28	0.78	0.46	2.83
		Smooth	2	1.06	2.03	0.64	0.46	3.11
	C	Gas	1	[a] 1.01	[a] 0.92	[a] 0.59	[a] 1.16	[a] 2.83
	D	Induction	1	N/A	2.30	2.68	1.28	0.28
	E	Induction	1	N/A	0.68	1.06	0.91	0.65
	F	Induction	1	N/A	0.56	3.21	1.47	2.55
Small	A	Electric Coil	2	2.73	0.54	1.87	2.36	1.65
	B	Electric Smooth	3	0.73	1.55	1.06	0.87	4.12
	D	Induction	2	N/A	1.04	0.79	1.47	0.37
			3	N/A	2.70	0.65	0.68	1.71
	E	Induction	2	N/A	1.08	1.19	1.19	2.03
Average				1.40	1.36	1.36	1.10	1.98

[a] Values describe data for four tests, not five.

The water-heating test variability could potentially be reduced by more stringent tolerances on the ambient conditions. Ambient air pressure, temperature, and humidity significantly impact the amount of water that evaporates during the test and the temperature at which the water begins to boil. Appendix I, however, only specifies ambient air temperature, and its relatively large tolerance, 77 °F ± 9 °F, could contribute to increased test variability.

Because the water-heating tests do not show an improvement in repeatability from test-to-test under the current DOE test conditions compared to the metal block tests, and because achieving closer ambient temperature tolerances would potentially place a high burden on manufacturers, DOE is proposing to use stainless steel hybrid test blocks in the test procedure for all products covered under the proposed definition of conventional cooking tops.

DOE acknowledges that the water-heating tests may better reflect actual consumer behavior for cooking tops, and invites comment on whether water-heating tests should be considered in place of the metal block-heating tests. DOE also invites comment on the appropriate test method and conditions for water-heating tests, and the burden that would be incurred by more stringent specifications for ambient conditions.

6. Non-Circular Electric Surface Units

As discussed in the beginning of section III.C, the small test block (6.25 inches diameter) is used for testing surface units with diameters of 7 inches or less, and the large test block (9 inches diameter) is used for electric surface units with diameters greater than 7 inches and all gas surface units. These provisions do not address how to determine the proper test block size for testing non-circular electric surface units.

DOE is aware that the Draft IEC 60350 Amendment requires measuring the dimensions of each side of rectangular or similar electric surface units, and by measuring the major and minor dimensions of elliptical or similar electric surface units. For these types of surface units, the smallest dimension is used to determine the cookware size according to the Draft IEC 60350 Amendment.

DOE lacks information on the size of the cookware consumers typically use for non-circular surface units. Given this lack of consumer use data, and given the potential non-representative thermal behavior of a test block in which a portion of the bottom is not exposed to the surface unit, DOE proposes to amend section 3.2.1 of Appendix I to replace the reference to an electric surface unit's diameter with the electric surface unit's smallest dimension to account for surface units of all shapes. This is consistent with the method included in the Draft IEC 60350 Amendment. DOE does not propose to change the requirement that all gas surface units be tested using the large test block.

DOE invites comments on whether using the smallest dimension of an electric surface unit is appropriate for determining the proper test block size.

D. Standby and Off Mode Test Procedure

EISA 2007 amended EPCA to require that DOE amend its test procedures for all covered residential products, including cooking products, to include measures of standby mode and off mode energy consumption, if technically feasible. (42 U.S.C. 6295(gg)(2)(A)) Accordingly, DOE recently conducted a separate rulemaking for conventional cooking products, dishwashers, and dehumidifiers to address standby and off mode energy consumption.[6] In the October 2012 Final Rule, DOE addressed standby mode and off mode energy consumption, as well as active mode fan-only operation, for conventional cooking products. 77 FR 65942.

Today's NOPR proposes a change to the definition of ''conventional cooking top'' to include induction technologies. Under this proposed definition, induction cooking tops would be covered by the standby and off mode test procedures adopted in the separate test procedure rulemaking.

DOE did not observe any standby mode or off mode operation or features unique to induction cooking tops that would warrant any changes to the standby mode and off mode test methods adopted by the October 2012 Final Rule for conventional cooking tops. DOE invites comment on whether induction cooking products require separate consideration for standby mode and off mode testing.

E. Compliance With Other EPCA Requirements

EPCA requires that any new or amended test procedures for residential products must be reasonably designed to produce test results which measure energy efficiency, energy use, or

[6] DOE pursued amendments to Appendix I addressing standby and off mode energy for microwave ovens as part of a separate rulemaking. The most recent notice for this rulemaking is the SNOPR published on May 16, 2012. 76 FR 72322.

estimated annual operating cost of a covered product during a representative average use cycle or period of use, and must not be unduly burdensome to conduct. (42 U.S.C. 6293(b)(3))

DOE tentatively concludes that the amended test procedures would produce test results that measure the energy consumption of cooking tops during representative use, and that the test procedures would not be unduly burdensome to conduct.

The test procedure proposed in today's NOPR follows the same method currently included in Appendix I for testing cooking tops, but would replace the aluminum test blocks with stainless steel hybrid blocks. DOE estimates current testing represents a cost of roughly $500 per test for labor, with a one-time investment of $2,000 for test equipment ($1,000 for test blocks and $1,000 for instrumentation). The proposed reusable test blocks would represent an additional one-time expense of approximately $500 for each test block, or $1000 for each pair of large and small diameter test blocks. No additional instrumentation would be required beyond what is required in the current test procedure. DOE does not believe this additional cost represents an excessive burden for test labs or manufacturers given the significant investments necessary to manufacture, test and market consumer appliances, as described further in section IV.B below. The only additional time burden associated with the proposed test method is the time required to weigh the stainless steel base in addition to the aluminum body. This additional step in the test procedure would increase the test duration by about 2 minutes per surface unit.

DOE concluded in the test procedure rulemaking for cooking products preceding today's NOPR, completed recently by the publication of the October 2012 Final Rule (see section I.B. for the rulemaking history for today's NOPR), that the amended test procedure is not unduly burdensome to conduct. In today's NOPR, DOE further concludes, given the small magnitude of the proposed changes (both in terms of the new test blocks and the time needed to take the test), that the newly proposed amended test procedure for cooking products would not be unreasonably burdensome to conduct.

IV. Procedural Issues and Regulatory Review

A. Review Under Executive Order 12866

The Office of Management and Budget has determined that test procedure rulemakings do not constitute ''significant regulatory actions'' under section 3(f) of Executive Order 12866, Regulatory Planning and Review, 58 FR 51735 (Oct. 4, 1993). Accordingly, this action was not subject to review under the Executive Order by the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget (OMB).

B. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires preparation of a regulatory flexibility analysis (RFA) for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, ''Proper Consideration of Small Entities in Agency Rulemaking,'' 67 FR 53461 (August 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the DOE rulemaking process. 68 FR 7990. DOE has made its procedures and policies available on the Office of the General Counsel's Web site: *http://energy.gov/gc/office-general-counsel.*

DOE reviewed today's proposed rule under the provisions of the Regulatory Flexibility Act and the procedures and policies published on February 19, 2003. The proposed rule would amend the test method for measuring the energy efficiency of conventional cooking tops and ranges to include test methods applicable to induction cooking products.

The Small Business Administration (SBA) considers a business entity to be a small business, if, together with its affiliates, it employs less than a threshold number of workers or earns less than the average annual receipts specified in 13 CFR part 121. The threshold values set forth in these regulations use size standards and codes established by the North American Industry Classification System (NAICS) that are available at: *http://www.sba.gov/sites/default/files/files/Size_Standards_Table.pdf.* The threshold number for NAICS classification code 335221, titled ''Household Cooking Appliance Manufacturing,'' is 750 employees; this classification includes manufacturers of residential conventional cooking products.

Most of the manufacturers supplying conventional cooking products are large multinational corporations. DOE surveyed the AHAM member directory to identify manufacturers of residential conventional cooking products. DOE then consulted publicly-available data, purchased company reports from vendors such as Dun and Bradstreet, and contacted manufacturers, where needed, to determine if they meet the SBA's definition of a ''small business manufacturing facility'' and have their manufacturing facilities located within the United States. Based on this analysis, DOE estimates that there are two small businesses that manufacture conventional cooking products.

For the reasons stated in the preamble, DOE has tentatively concluded that the proposed rule would not have a significant impact on either small or large manufacturers under the applicable provisions of the Regulatory Flexibility Act. The proposed rule would amend DOE's test procedures for cooking products by incorporating testing provisions to address active mode energy consumption for induction cooking products that will be used to develop and test compliance with any future energy conservation standards that may be established by DOE. The test procedure amendments involve the measurement of active mode energy consumption through the use of a different metal test block than is currently specified for conventional cooking tops. The proposed amendments would also apply for testing products currently considered conventional cooking tops. DOE estimates a cost for this new equipment of approximately $1000. Additionally, DOE estimates a cost of roughly $6,000 for manufacturers to test induction cooking products not currently covered by the test procedure. This estimate assumes $500 per test, as described in section III.E, with up to 12 total tests needed assuming three induction cooking top models with four individual tests per cooking top model. This cost is small compared to the average annual revenue of the two identified small businesses, which DOE estimates to be over $40 million.[7] These tests follow the same methodology and can be conducted in the same facilities used for the current energy testing of conventional cooking tops, so there would be no additional facilities costs required by the proposed rule.

For these reasons, DOE tentatively concludes and certifies that the proposed rule would not have a significant economic impact on a substantial number of small entities. Accordingly, DOE has not prepared a

[7] Estimated average revenue is based on financial information provided for the two small businesses in reports provided by Dun and Bradstreet.

regulatory flexibility analysis for this rulemaking. DOE will transmit the certification and supporting statement of factual basis to the Chief Counsel for Advocacy of the SBA for review under 5 U.S.C. 605(b).

C. Review Under the Paperwork Reduction Act of 1995

Manufacturers of conventional cooking products must certify to DOE that their products comply with any applicable energy conservation standards. In certifying compliance, manufacturers must test their products according to the DOE test procedures for conventional cooking products, including any amendments adopted for those test procedures. DOE has established regulations for the certification and recordkeeping requirements for all covered consumer products and commercial equipment, including conventional cooking products. (76 FR 12422 (March 7, 2011). The collection-of-information requirement for the certification and recordkeeping is subject to review and approval by OMB under the Paperwork Reduction Act (PRA). This requirement has been approved by OMB under OMB control number 1910–1400. Public reporting burden for the certification is estimated to average 20 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

There is currently no information collection requirement related specifically to induction cooking tops. In the event that DOE proposes an energy conservation standard with which manufacturers must demonstrate compliance, or otherwise proposes to require the collection of information derived from the testing of induction cooking tops according to this test procedure, DOE will seek OMB approval of such information collection requirement. DOE will seek approval either through a proposed amendment to the information collection requirement approved under OMB control number 1910–1400 or as a separate proposed information collection requirement.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number.

D. Review Under the National Environmental Policy Act of 1969

In this proposed rule, DOE proposes test procedure amendments that it expects will be used to develop and implement future energy conservation standards for conventional cooking products. DOE has determined that this rule falls into a class of actions that are categorically excluded from review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and DOE's implementing regulations at 10 CFR part 1021. Specifically, this proposed rule would amend the existing test procedures without affecting the amount, quality or distribution of energy usage, and, therefore, would not result in any environmental impacts. Thus, this rulemaking is covered by Categorical Exclusion A5 under 10 CFR part 1021, subpart D, which applies to any rulemaking that interprets or amends an existing rule without changing the environmental effect of that rule. Accordingly, neither an environmental assessment nor an environmental impact statement is required.

E. Review Under Executive Order 13132

Executive Order 13132, ''Federalism,'' 64 FR 43255 (August 4, 1999) imposes certain requirements on agencies formulating and implementing policies or regulations that preempt State law or that have Federalism implications. The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE has examined this proposed rule and has determined that it would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. EPCA governs and prescribes Federal preemption of State regulations as to energy conservation for the products that are the subject of today's proposed rule. States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297(d)) No further action is required by Executive Order 13132.

F. Review Under Executive Order 12988

Regarding the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, ''Civil Justice Reform,'' 61 FR 4729 (Feb. 7, 1996), imposes on Federal agencies the general duty to adhere to the following requirements: (1) Eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; (3) provide a clear legal standard for affected conduct rather than a general standard; and (4) promote simplification and burden reduction. Section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in sections 3(a) and 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, the proposed rule meets the relevant standards of Executive Order 12988.

G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. Pub. L. 104–4, sec. 201 (codified at 2 U.S.C. 1531). For a proposed regulatory action likely to result in a rule that may cause the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of $100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)) The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected

officers of State, local, and Tribal governments on a proposed ''significant intergovernmental mandate,'' and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect small governments. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820; also available at *http://energy.gov/gc/office-general-counsel*. DOE examined today's proposed rule according to UMRA and its statement of policy and determined that the rule contains neither an intergovernmental mandate, nor a mandate that may result in the expenditure of $100 million or more in any year, so these requirements do not apply.

H. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105–277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

I. Review Under Executive Order 12630

DOE has determined, under Executive Order 12630, ''Governmental Actions and Interference with Constitutionally Protected Property Rights'' 53 FR 8859 (March 18, 1988) that this regulation would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

J. Review Under Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note) provides for agencies to review most disseminations of information to the public under guidelines established by each agency pursuant to general guidelines issued by OMB. OMB's guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE's guidelines were published at 67 FR 62446 (Oct. 7, 2002). DOE has reviewed today's proposed rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

K. Review Under Executive Order 13211

Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use,'' 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to OMB, a Statement of Energy Effects for any proposed significant energy action. A ''significant energy action'' is defined as any action by an agency that promulgated or is expected to lead to promulgation of a final rule, and that: (1) Is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (3) is designated by the Administrator of OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

Today's regulatory action to amend the test procedure for measuring the energy efficiency of conventional cooking products is not a significant regulatory action under Executive Order 12866. Moreover, it would not have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as a significant energy action by the Administrator of OIRA. Therefore, it is not a significant energy action, and, accordingly, DOE has not prepared a Statement of Energy Effects.

L. Review Under Section 32 of the Federal Energy Administration Act of 1974

Under section 301 of the Department of Energy Organization Act (Pub. L. 95–91; 42 U.S.C. 7101), DOE must comply with section 32 of the Federal Energy Administration Act of 1974, as amended by the Federal Energy Administration Authorization Act of 1977. (15 U.S.C. 788; FEAA) Section 32 essentially provides in relevant part that, where a proposed rule authorizes or requires use of commercial standards, the notice of proposed rulemaking must inform the public of the use and background of such standards. In addition, section 32(c) requires DOE to consult with the Attorney General and the Chairman of the Federal Trade Commission (FTC) concerning the impact of the commercial or industry standards on competition. The amendments proposed in today's NOPR do not authorize or require the use of any commercial standards.

V. Public Participation

A. Attendance at Public Meeting

The time, date and location of the public meeting are listed in the **DATES** and **ADDRESSES** sections at the beginning of this document. If you plan to attend the public meeting, please notify Ms. Brenda Edwards at (202) 586–2945 or *Brenda.Edwards@ee.doe.gov*. Please note that foreign nationals visiting DOE Headquarters are subject to advance security screening procedures. Any foreign national wishing to participate in the meeting should advise DOE as soon as possible by contacting Ms. Edwards to initiate the necessary procedures. Please also note that those wishing to bring laptops into the Forrestal Building will be required to obtain a property pass. Visitors should avoid bringing laptops, or allow an extra 45 minutes.

In addition, you can attend the public meeting via Webinar. Webinar registration information, participant instructions, and information about the capabilities available to Webinar participants will be published on DOE's Web site *http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/57*. Participants are responsible for ensuring their systems are compatible with the Webinar software.

B. Procedure for Submitting Prepared General Statements For Distribution

Any person who has plans to present a prepared general statement may request that copies of his or her statement be made available at the public meeting. Such persons may submit requests, along with an advance electronic copy of their statement in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format, to the appropriate address shown in the **ADDRESSES** section at the beginning of this NOPR. The request and advance copy of statements must be received at least one week before the public meeting and may be emailed, hand-delivered, or sent by mail. DOE prefers to receive requests and advance copies via email. Please include a telephone number to enable DOE staff to make a follow-up contact, if needed.

C. Conduct of Public Meeting

DOE will designate a DOE official to preside at the public meeting and may also use a professional facilitator to aid discussion. The meeting will not be a judicial or evidentiary-type public hearing, but DOE will conduct it in accordance with section 336 of EPCA (42 U.S.C. 6306). A court reporter will be present to record the proceedings and

prepare a transcript. DOE reserves the right to schedule the order of presentations and to establish the procedures governing the conduct of the public meeting. After the public meeting, interested parties may submit further comments on the proceedings as well as on any aspect of the rulemaking until the end of the comment period.

The public meeting will be conducted in an informal, conference style. DOE will present summaries of comments received before the public meeting, allow time for prepared general statements by participants, and encourage all interested parties to share their views on issues affecting this rulemaking. Each participant will be allowed to make a general statement (within time limits determined by DOE), before the discussion of specific topics. DOE will permit, as time permits, other participants to comment briefly on any general statements.

At the end of all prepared statements on a topic, DOE will permit participants to clarify their statements briefly and comment on statements made by others. Participants should be prepared to answer questions by DOE and by other participants concerning these issues. DOE representatives may also ask questions of participants concerning other matters relevant to this rulemaking. The official conducting the public meeting will accept additional comments or questions from those attending, as time permits. The presiding official will announce any further procedural rules or modification of the above procedures that may be needed for the proper conduct of the public meeting.

A transcript of the public meeting will be included in the docket, which can be viewed as described in the *Docket* section at the beginning of this NOPR. In addition, any person may buy a copy of the transcript from the transcribing reporter.

D. Submission of Comments

DOE will accept comments, data, and information regarding this proposed rule before or after the public meeting, but no later than the date provided in the **DATES** section at the beginning of this proposed rule. Interested parties may submit comments using any of the methods described in the **ADDRESSES** section at the beginning of this NOPR. Any comments submitted must identify the NOPR for Test Procedures for Conventional Cooking Products, and provide docket number EERE–2012–BT–TP–0013 and/or regulatory information number (RIN) number 1904–AC71.

Submitting comments via regulations.gov. The regulations.gov Web page will require you to provide your name and contact information. Your contact information will be viewable to DOE Building Technologies staff only. Your contact information will not be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment or in any documents attached to your comment. Any information that you do not want to be publicly viewable should not be included in your comment, nor in any document attached to your comment. Persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to regulations.gov information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information (CBI)). Comments submitted through regulations.gov cannot be claimed as CBI. Comments received through the Web site will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section.

DOE processes submissions made through regulations.gov before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not be viewable for up to several weeks. Please keep the comment tracking number that regulations.gov provides after you have successfully uploaded your comment.

Submitting comments via email, hand delivery, or mail. Comments and documents submitted via email, hand delivery, or mail also will be posted to regulations.gov. If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information on a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments.

Include contact information each time you submit comments, data, documents, and other information to DOE. If you submit via mail or hand delivery, please provide all items on a CD, if feasible. It is not necessary to submit printed copies. No facsimiles (faxes) will be accepted.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide documents that are not secured, written in English and are free of any defects or viruses. Documents should not contain special characters or any form of encryption and, if possible, they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. According to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email, postal mail, or hand delivery two well-marked copies: one copy of the document marked confidential including all the information believed to be confidential, and one copy of the document marked non-confidential with the information believed to be confidential deleted. Submit these documents via email or on a CD, if feasible. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) A description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person which would result from public disclosure; (6) when such information might lose its confidential character due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

E. Issues on Which DOE Seeks Comment

Although DOE welcomes comments on any aspect of this proposal, DOE is particularly interested in receiving comments and views of interested parties concerning the following issues:

1. Proposed Amended Definitions

DOE requests comment on the proposed amended definitions of ''conventional cooking top'' and ''active mode.'' (See section III.A)

2. Stainless Steel Hybrid Test Blocks

DOE seeks comment on its proposal to require the use of stainless steel hybrid test blocks for testing all cooking tops that would be covered by the proposed definition of conventional cooking tops in an amended cooking products test procedure, including the potential burden associated with the requirement for such new test equipment. (See section III.C.4)

3. Water-Heating Test

DOE invites comment on whether water-heating tests should be considered in place of the metal block-heating tests, and on the appropriate water-heating test method and conditions. DOE also invites comment on the burden that would be incurred by more stringent specifications for ambient conditions. (See section III.C.5)

4. Non-Circular Electric Surface Units

DOE invites comments on whether using the smallest dimension of an electric surface unit is appropriate for determining the proper test block size. (See section III.C.6)

5. Standby and Off Mode

DOE requests comment on whether induction cooking products include any unique features or operational modes that would not be covered by the definitions and standby and off mode test procedures included in the October 2012 Final Rule. 77 FR 65942. (See section III.D)

VI. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this proposed rule.

List of Subjects in 10 CFR Part 430

Administrative practice and procedure, Confidential business information, Energy conservation, Household appliances, Imports, Intergovernmental relations, Small businesses.

Issued in Washington, DC, on January 18, 2013.

Kathleen B. Hogan,

Deputy Assistant Secretary for Energy Efficiency, Energy Efficiency and Renewable Energy.

For the reasons stated in the preamble, DOE is proposing to amend part 430 of Chapter II of Title 10, Code of Federal Regulations as set forth below:

PART 430—ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS

■ 1. The authority citation for part 430 continues to read as follows:

Authority: 42 U.S.C. 6291–6309; 28 U.S.C. 2461 note.

■ 2. Section 430.2 is amended by revising the definition for ''conventional cooking top'' to read as follows:

§ 430.2 Definitions.

* * * * *

Conventional cooking top is a household cooking appliance within a class of kitchen ranges and ovens, each of which consists of a horizontal surface containing one or more surface units that utilize a gas flame, electric resistance heating, or electric inductive heating.

* * * * *

Appendix I—[Amended]

■ 3. Appendix I to subpart B of part 430 is amended by:

■ a. Revising the Note;

■ b. Revising section 1.1 in section 1. Definitions;

■ c. Revising sections 2.7, 2.7.2, and 2.7.3 in section 2. Test Conditions;

■ d. Revising sections 3.1.2 and 3.3.2 in section 3. Test Methods and Measurements; and

■ e. Revising sections 4.2.1.1 and 4.2.1.2 in section 4. Calculation of Derived Results From Test Measurements.

Appendix I to Subpart B of Part 430—Uniform Test Method for Measuring the Energy Consumption of Conventional Ranges, Conventional Cooking Tops, Conventional Ovens, and Microwave Ovens

Note: Any representation related to active mode energy consumption of conventional ranges, conventional cooking tops (except for induction cooking products), and conventional ovens must be based upon results generated under this test procedure. Any representation made after April 29, 2013 related to standby mode and off mode energy consumption of conventional ranges, conventional cooking tops (except for induction cooking products), and conventional ovens, and any representation made after [INSERT DATE 180 DAYS AFTER FINAL RULE PUBLICATION IN THE **FEDERAL REGISTER**] related to any energy consumption of induction cooking products, must be based upon results generated under this test procedure.

Any representation made after July 17, 2013 related to standby mode and off mode energy consumption of microwave ovens must also be based upon this test procedure. Any representation related to standby mode and off mode energy consumption of microwave ovens made between February 17, 2013 and July 17, 2013 may be based upon results generated under this test procedure or upon the test procedure as contained in the 10 CFR parts 200 to 499 edition revised as of January 1, 2012.

Upon the compliance date(s) of any energy conservation standard(s) for conventional ranges, conventional cooking tops, conventional ovens, and microwave ovens, use of the applicable provisions of this test procedure to demonstrate compliance with the energy conservation standard will also be required.

1. Definitions

1.1 *Active mode* means a mode in which the product is connected to a mains power source, has been activated, and is performing the main function of producing heat by means of a gas flame, electric resistance heating, electric inductive heating, or microwave energy, or circulating air internally or externally to the cooking product. Delay start mode is a one-off, user-initiated, short-duration function that is associated with an active mode.

* * * * *

2. Test Conditions

* * * * *

2.7 *Test blocks for conventional oven and cooking top.* The test blocks for conventional ovens and the test block bodies for conventional cooking tops shall be made of aluminum alloy No. 6061, with a specific heat of 0.23 Btu/lb- °F (0.96 kJ/[kg ÷ °C]) and with any temper that will give a coefficient of thermal conductivity of 1073.3 to 1189.1 Btu-in/h-ft^2- °F (154.8 to 171.5 W/[m ÷ °C]). Each test block and test block body shall have a hole at its top. The hole shall be 0.08 inch (2.03 mm) in diameter and 0.80 inch (20.3 mm) deep. Other means may be provided which will ensure that the thermocouple junction is installed at this same position and depth.

The test block bases for conventional cooking tops shall be made of stainless steel grade 430, with a specific heat of 0.11 Btu/lb- °F (0.46 kJ/[kg ÷ °C]) and with coefficient of thermal conductivity of 172.0 to 190.0 Btu-in/h-ft^2- °F (24.8 to 27.4 W/[m ÷ °C]).

The bottom of each test block and test block body, and top and bottom of each test block base, shall be flat to within 0.002 inch (0.051 mm) TIR (total indicator reading). Determine the actual weight of each test block, test block body, and test block base

with a scale with an accuracy as indicated in section 2.9.5 of this appendix.

* * * * *

2.7.2 *Small test block for conventional cooking top.* The small test block shall comprise a body and separate base. The small test block body, W_2, shall be 6.25±0.05 inches (158.8±1.3 mm) in diameter, approximately 2.5 inches (64 mm) high and shall weigh 7.5±0.1 lbs (3.40±0.05 kg). The small test block base, W_3, shall be 6.25±0.05 inches (158.8±1.3 mm) in diameter, approximately 0.25 inches (6.4 mm) high and shall weigh 2.2±0.1 lbs (1.00±0.05 kg). The small test block body shall not be fixed to the base, and shall be centered over the base for testing.

2.7.3 *Large test block for conventional cooking top.* The large test block shall comprise a body and separate base. The large test block body for the conventional cooking top, W_4, shall be 9±0.05 inches (228.6±1.3 mm) in diameter, approximately 2.7 inches (69 mm) high and shall weigh 16.9±0.1 lbs (7.67±0.05 kg). The large test block base, W_5, shall be 9±0.05 inches (228.6±1.3 mm) in diameter, approximately 0.25 inches (6.4 mm) high and shall weigh 4.3±0.1 lbs (1.95±0.05 kg). The large test block body shall not be fixed to the base, and shall be centered over the base for testing.

* * * * *

3. Test Methods and Measurements

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3.1.2 *Conventional cooking top.* Establish the test conditions set forth in section 2, Test Conditions, of this appendix. Turn off the gas flow to the conventional oven(s), if so equipped. The temperature of the conventional cooking top shall be its normal nonoperating temperature as defined in section 1.12 and described in section 2.6 of this appendix. Set the test block in the center of the surface unit under test. The small test block, W_2 and W_3, shall be used on electric surface units with a smallest dimension of 7 inches (178 mm) or less. The large test block, W_4 and W_5, shall be used on electric surface units with a smallest dimension over 7 inches (178 mm) and on all gas surface units. Turn on the surface unit under test and set its energy input rate to the maximum setting. When the test block reaches 144 °F (80 °C) above its initial test block temperature, immediately reduce the energy input rate to 25±5 percent of the maximum energy input rate. After 15±0.1 minutes at the reduced energy setting, turn off the surface unit under test.

* * * * *

3.3.2 Record measured test block, test block body, and test block base weights W_1, W_2, W_3, W_4, and W_5 in pounds (kg).

* * * * *

4. Calculation of Derived Results From Test Measurements

* * * * *

4.2 * * *

4.2.1 * * *

4.2.1.1 *Electric surface unit cooking efficiency.* Calculate the cooking efficiency, $Eff_{SU,}$ of the electric surface unit under test, defined as:

$$Eff_{SU} = \left(W_{TB} \times C_{p,TB} + W_B \times C_{p,B}\right) \times \left(\frac{T_{SU}}{K_e \times E_{CT}}\right)$$

Where:

W_{TB} = measured weight of test block body, W_2 or W_4, expressed in pounds (kg).

$C_{p,TB}$ = 0.23 Btu/lb-°F (0.96 kJ/kg ÷ °C), specific heat of test block body.

W_B = measured weight of test block base, W_3 or W_5, expressed in pounds (kg).

$C_{p,B}$ = 0.11 Btu/lb-°F (0.46 kJ/kg ÷ °C), specific heat of test block base.

T_{SU} = temperature rise of the test block: Final test block temperature, T_{CT}, as determined in section 3.2.2 of this appendix, minus the initial test block temperature, T_I, expressed in °F (°C) as determined in section 2.7.5 of this appendix.

K_e = 3.412 Btu/Wh (3.6 kJ/Wh), conversion factor of watt-hours to Btu's.

E_{CT} = measured energy consumption, as determined according to section 3.2.2 of this appendix, expressed in watt-hours (kJ).

4.2.1.2 *Gas surface unit cooking efficiency.* Calculate the cooking efficiency, $Eff_{SU,}$ of the gas surface unit under test, defined as:

$$Eff_{SU} = \frac{\left(W_4 \times C_{p,TB} + W_5 \times C_{p,B}\right) \times T_{SU}}{E}$$

Where:

W_{TB} = measured weight of test block body as measured in section 3.3.2 of this appendix, expressed in pounds (kg).

W_B = measured weight of test block base as measured in section 3.3.2 of this appendix, expressed in pounds (kg).

$C_{p,TB}$, $C_{p,B}$, and T_{SU} are the same as defined in section 4.2.1.1 of this appendix.

and,

$E = (V_{CT} \times H) + (E_{IC} \times K_e)$,

Where:

V_{CT} = total gas consumption in standard cubic feet (L) for the gas surface unit test as measured in section 3.2.2.1 of this appendix.

E_{IC} = electrical energy consumed in watt-hours (kJ) by an ignition device of a gas surface unit as measured in section 3.2.2.1 of this appendix.

K_e = 3.412 Btu/Wh (3.6 kJ/Wh), conversion factor of watt-hours to Btu's.

H = either H_n or H_p, the heating value of the gas used in the test as specified in sections 2.2.2.2 and 2.2.2.3 of this appendix, expressed in Btu's per standard cubic foot (kJ/L) of gas.

* * * * *

[FR Doc. 2013–01526 Filed 1–29–13; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2012–1319; Directorate Identifier 2012–NM–179–AD]

RIN 2120–AA64

Airworthiness Directives; the Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to revise an existing airworthiness directive (AD) that applies to all The Boeing Company Model 757 airplanes. The existing AD currently requires revising the maintenance program by incorporating new and revised fuel tank system limitations in the Airworthiness Limitations (AWLs) section of the Instructions for Continued Airworthiness; and requires the initial inspection of certain repetitive AWL inspections to phase-in those inspections, and repair if necessary. Since we issued that AD, we have found errors in paragraph references in the existing AD. This proposed AD would revise those paragraph references to refer to the correct paragraphs. We are proposing this AD to prevent the potential for ignition sources inside fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which in combination with flammable fuel vapors, could result in a