AIR-CONDITIONING, HEATING, & REFRIGERATION INSTITUTE
we make life better™

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January 11, 2016

Mr. Hampton Newsome, Attorney
Federal Trade Commission
Office of the Secretary
600 Pennsylvania Avenue NW.
Suite CC–5610 (Annex E)
Washington, DC 20580

Re: Energy Labeling Amendments (16 CFR part 305) (Project No. R611004)

Dear Mr. Newsome:

These comments are submitted by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) in response to the Federal Trade Commission (FTC) notice of proposed rulemaking (NOPR) regarding amendments to the Energy Labeling rule appearing in the *Federal Register* on November 2, 2015.

AHRI is the trade association representing manufacturers of heating, cooling, water heating, and commercial refrigeration equipment. More than 300 members strong, AHRI is an internationally recognized advocate for the industry and develops standards for and certifies the performance of many of the products manufactured by our members. In North America, the annual output of the HVACR industry is worth more than $20 billion. In the United States alone, our members employ approximately 130,000 people and support some 800,000 dealers, contractors, and technicians.

These comments address the proposals for the Online Label Database, Heating and Cooling Equipment Requirements and Water Heater Labels.

Online Label Database

FTC proposes to require that URL links to the EnergyGuide labels be submitted to Department of Energy (DOE)'s CCMS database with ongoing routine reporting. AHRI agrees with the concept of providing EnergyGuide labels in online databases. However, without further clarification the FTC proposal seems to be unnecessarily restrictive and counter to the practice AHRI employs to provide online access to EnergyGuide labels. Currently, the AHRI Directory (hereinafter referred to as "Directory") creates a PDF EnergyGuide label for each model upon request using the information in the Directory at the time of request. In 2015, just under 60,000 EnergyGuide labels were generated from the Directory using this process. Because the majority of manufacturers are already using

the Directory to upload their labels, it would be efficient and economical to use the Directory as a basis from which the FTC-required electronic label database can draw. A link to FTC labels is available to a PDF download through the Directory that could be reported to CCMS with minimal changes to the current Directory. A link to a PDF download is more consistent with the current listing as the Directory is dynamic and updated daily. Furthermore, a link to a PDF download serves the same purpose, is more reliable, and more efficient than a link to a displayed PDF. The instant download eliminates the need to store the file one line. This process for providing an EnergyGuide label should be adequate for this proposed requirement. The consumer will receive the exact same information, without significant additional costs and maintenance added for manufacturers.

If FTC's proposal precludes the current practice of providing a PDF download of the EnergyGuide label, then the assessment that "AHRI with adequate notice can easily generate web links to those pdf files" is incorrect. Significant changes would be required to the Directory to meet the requirement. For AHRI's Air Conditioning and Heat Pump Directories, it would take approximately one month for a full-time web developer to reconfigure the programming in order to display the EnergyGuide label as a URL, rather than download. AHRI's Residential Water Heaters, Residential Boilers and Residential Furnace programs would require the same updates representing additional resources. These changes would require costs but provide no benefit. Consumers already access the FTC EnergyGuide label through the AHRI Directory. Proposing a specific manner of providing this information is unnecessarily restrictive. Moreover, AHRI recognizes that our members manufacture products that are not within the scope of the AHRI Directory, and therefore, even if FTC were to propose a specific mechanism for providing an electronic label that is consistent with methods used by the Directory, a prescriptive method may create administrative burdens for products that are not listed in the AHRI Directory. Therefore, AHRI requests that FTC allow for the methods of providing the label to be open ended.

Based on the NOPR, it does not appear that FTC has specifically prescribed an electronic label delivery method, and therefore, that the link to a download of the EnergyGuide label would be sufficient to meet both the regulatory requirements and the intent of its undergirding policy. The proposed language states "…the manufacturer must make a copy of the label available on a publicly accessible Web site in a manner that allows catalog sellers to hyperlink to the label <u>or download</u> it for use in Web sites or paper catalogs." AHRI requests that the FTC specifically clarify in the final rule that the structure described above—a download of a PDF label from the AHRI Directory—meets the FTC's requirements.

The proposed language for §305.6, *Duty to provide labels,* (a) includes the statement, "The label for each specific model must remain on the Web site for six months after production of that model ceases." The current practice in the Directory is for the manufacturer to discontinue a model when it is no longer in production. The listing remains in the Directory for one year as "discontinued." During that time the link to the label is available and reported to CCMS. We request that the language be changed in

this section to indicate the "model must remain on the Web site for a minimum of six months after production of that model ceases." As written, it could be interpreted to mean that the link cannot be made available after 6 months after production has passed.

Heating and Cooling Equipment Requirements

FTC has proposed restructuring the EnergyGuide labels to indicate the specific states for which a model can be sold on the bottom portion of the label and to include only the lowest installed efficiency on the top portion. AHRI supports the proposal for the bottom portion of the label but, FTC has also proposed to eliminate the display of the range of efficiencies in the top portion of the label. AHRI does not agree with the proposal to remove the range of efficiencies on the EnergyGuide label.

Regarding the state-specific information on the bottom of the label, AHRI agrees that with the introduction of regional efficiency standards, it is necessary to clarify the states for which a model can be sold. The three proposed options for the bottom portion of the label adequately communicate this information by specifically showing the states where the model can be sold.

Regarding the elimination of the efficiency range information on the top-portion of the label, AHRI does not support the change to include only the lowest installed efficiency on the Efficiency Rating chart. The inclusion of the range of installed efficiencies was only added to the label at the beginning of 2015. The NOPR does not clarify why FTC feels it is necessary to remove the range from the label so soon after it was introduced. Adding the range of installed efficiencies was a positive change that more clearly displays comparable efficiencies between models by clarifying the performance capability. Only including the minimum performance is misleading to a consumer who is attempting to compare units as the minimum installed efficiency does not correctly characterize the product. Furthermore, eliminating the range for information so soon after it was added causes an unnecessary administrative burden to manufacturers. Continuing to include the range would eliminate the need for two asterisks shown on the sample label in Figure 2; the only asterisk necessary would be to define SEER.

AHRI requests that the FTC maintain the current range on the top-half of the label, with one important modification. AHRI recommends that FTC update the SEER ranges shown in Appendix H to Part 305—*Cooling Performance and Cost for Central Air Conditioners*. 16 C.F.R. § 305 App. H, upon which the efficiency range information of the EnergyGuide label is based. The NOPR should include a proposal to update the Range of SEERs shown in the Appendix H table to account for the regional efficiency standards. For Split System Central ACs, the low end of the range should be 13 SEER for northern states only, and 14 SEER for the two other labels. The current table has a low SEER of 13 for all Central SC Split System Units. For the models where all installed efficiencies meet the 14 SEER minimums in the south and southwest states, the least efficient models will have a minimum efficiency of 14 SEER. Therefore, the Low Range of SEERs should be 14 on the two proposed EnergyGuide labels that include the map with southeast and northern states shaded and that do not require a map because 14 is the lowest SEER that can be

installed in those regions. It is important to clarify for consumers the correct range for these regions.

The NOPR includes a proposal to allow a single label to reflect energy usage for furnace and ACs or HPs for single-packaged air conditioners less than 65,000 Btu/h with gas heat, or Rooftop Systems as stated in the NOPR. AHRI appreciates FTC's action on our recommendation and reaffirms its support for this proposal.

The NOPR includes proposals to remove the requirement to include a manufacturer or PBM name and allow multiple models numbers on the EnergyGuide labels. AHRI supports these proposals provided that they are optional as proposed.

Water Heater Labels

On this subject FTC specifically asked for comment on whether water heater labels should be modified in response to a new DOE test procedure. Because the amended DOE test procedure for water heaters requires a significantly different energy metric and re-categorizes water heaters of comparable hot water delivery capability, we maintain that the law and common sense mandate a change of water heater labels. However, the development of those revised labels should be a separate rulemaking independent of this rulemaking. All the information that is needed to develop amended water heater labels is not yet available. As an example, as noted in the NOPR, neither manufacturers nor FTC has the data from which revised ranges of comparability can be established. Additionally, because of the significance of the changes introduced by the amended DOE test procedure, it is essential that the implementation of the revised test procedure and the use of amended EnergyGuide labels reflecting that test procedure, be coordinated to the fullest extent possible to occur at the same time. That can only happen if the water heater label changes are addressed in a separate rulemaking unencumbered by label changes addressing other products.

AHRI members who manufacture water heaters have undertaken expense, effort and resources to comply with the myriad changes prompted by the new test procedure and metric. In an effort to align the various requirements imposed by concurrent changes to efficiency requirements, metrics, and test procedures, AHRI proactively supplied a suggested label format to the FTC on April 3, 2015**.** These suggested labels are attached to these comments. AHRI requests that the FTC revisit these recommended labels. It is in everyone's best interest to develop a label that provides clear and concise information to consumers while not adversely effecting competition among water heater manufacturers. AHRI is confident that our recommended labels meet all of these necessary objectives. For example, it is important to clearly identify the bins based on First Hour Rating or Maximum GPM created by the new test procedure and to inform consumers that only water heaters within the same bin should be compared.

AHRI notes that there are two typographical errors on the proposed label included with the NOPR. The bins are labeled as very low, small, medium, and high, which is

inconsistent with the test procedure. As noted in other locations in the NOPR the bins are identified as very small, low, medium and high. The statement under the term "Hourly Hot Water Output" says "(How much how hot water you get in an hour)". The second "how" should be deleted, assuming the term "Hourly Hot Water Output" is still used in the final label. See below for more information.

First Hour Rating

FTC has proposed using the term "Hourly Hot Water Output" rather than First Hour Rating. AHRI objects to the introduction of this term on the proposed label. This term is otherwise undefined and misleading. The term "Hourly Hot Water Output" incorrectly implies that a water heater's hot water delivery capability is measured and performs at the indicated rate hour-to-hour. In fact, as is well-established by the test procedure, the water heater's delivery is based on the first hour of a water heater's operation. That measure of performance is not equivalent to the operation of the second hour or any subsequent hours of operation. The term 'First Hour Rating' was established in the initial DOE water heater efficiency test procedures as the measure of performance, also referred to as capacity, for residential storage water heaters. It has been in use since 1980 and is referenced in building codes and sizing guides. We note that the NOPR does not indicate whether FTC intended to apply the use of this new term also to instantaneous water heaters. AHRI recommends the labeling regulations continue to use the terms 'First Hour Rating' for storage water heaters and 'Max GPM' for instantaneous water heaters to be consistent with the DOE test procedure. The introduction of new term(s) is unnecessary and will create further consumer confusion. By eliminating this new term, the "*" shown on the sample proposed label will no longer be necessary. There is no apparent value in the addition of the term "Hourly Hot Water Output."

The EnergyGuide label proposed by AHRI includes the definition of First Hour Rating for storage water heaters and Max GPM for instantaneous water heaters as provided in DOE's regulations. Our recommended label included these definitions to help educate consumers on the existing terms that are consistent with the certified ratings, building codes, sizing guides, and historic usage.

Importantly, because the term "Hourly Hot Water Output" is misleading, it cannot assist consumers in making purchasing decisions, as is required by EPCA (42 U.S.C. § 6294(c)(5)). Moreover, AHRI notes requiring the language "Hourly Hot Water Output" may run afoul of the DOE regulatory requirement not to make representations about a product's efficiency and operation that are inconsistent with the applicable test procedure. 42 U.S.C. § 6293(b). As discussed above, the applicable test procedure only measures the first hour of operation, not subsequent hours, and therefore is not representative of the current test procedure. DOE-specified metrics of performance for residential water heaters are First Hour Rating or Max GPM. These are certified values and they should be identified on the FTC label using the official term.

Storage Vessel Capacity

The sample proposed label includes the term "tank size" on the top left corner. This terms is not defined elsewhere and should not be required on the label. If this information needs to be displayed, it should match the language on the rating plate required by applicable the nationally-recognized safety standard for residential gas storage water heaters, ANSI Z21.10.1-2014/CSA 4.1-2014, *"Gas water heaters, volume I, storage water heaters with input ratings of 75,000 Btu per hour or less."* The term used in that safety standard is "Storage Vessel Capacity." If FTC determines this information needs to be provided on the EnergyGuide label, the term and number displayed should match the rating plate to ensure consistency between the labels on the water heater. The current label and the label proposed by AHRI do not include the storage vessel capacity.

Ranges of Comparability

FTC has proposed to first divide water heaters by storage vessel capacity, and then further by the bin. Dividing first by storage vessel capacity represents an unnecessary additional change that will confuse rather than assist consumers. It is only necessary to compare models within the same bin, the addition of storage vessel capacity further complicates this comparison. Furthermore, it will be very unlikely to have a water heater with storage vessel capacity greater than 55 gallons in the very small usage bin or vice versa. The second note on the sample label is incorrect and will be difficult for consumers to understand as it provides two gallon ranges stating: "cost range based only on models of similar tank size (55 gallons or more), fueled by natural gas and a medium hourly hot water output (51-75 gallons)." First Hour Rating or Max GPM determine the usage bins and should be the only metrics for comparison. It is essential to communicate that only models within the same bins should be compared, volume alone is not a good sizing guide. First Hour Rating is being driven by both volume and input. This message is clearly stated on the EnergyGuide labels proposed by AHRI.

The FTC has proposed combining the existing categories for electric water heaters and heat pumps. FTC should make it clear that this applies only to storage water heaters. On page 67361 the NOPR states, "Indeed, as a result of the new DOE standards, most if not all electric water heaters will include heat pump technology." This is not correct. The revised DOE minimum efficiency standards for residential electric storage water heaters do not require the use of heat pump technology for models smaller than 55 gallons. Models in these smaller sizes represent the large majority of residential electric storage water heater sales. It should be noted that this may lead to a wide range of comparability for electric storage water heaters with products only included on the far ends of the range. Most, if not all, electric resistance water heaters have energy factors of either 0.94 or 0.95. Heat pump water heaters have energy factors in the range of 2.2 to 3.4; two to three times more efficient that an electric resistance model. In practice any electric resistance model will be at the high end of the energy cost range and any heat pump water heater will be in the lowest quarter of the energy cost range. No models will exist in between those extremes. Nonetheless, AHRI generally supports this proposed change for storage electric water heaters.

Another area in which this NOPR is incomplete is the development of an Energyguide label for residential electric instantaneous water heaters. The revised DOE water heater efficiency test procedure now includes a method to measure the efficiency of these models. Consequently, an appropriate Energyguide label must be developed for this type of water heater.

Therms per Year

The label proposed by AHRI does not include the estimated annual energy use in therms. This was a conscious decision. Our members determined that the therms per year is not something most consumers look for on the label. Consumers are more attentive to estimated cost of operation. The annual energy cost and therms are based on the same scale. The ”annual therms used” value can easily be calculated from the annual energy cost and national average cost of natural gas, which are both provided. In our recommended labels it was decided that the space on the label could be better used to further clarify the bins, as shown on the proposed AHRI label.

Implementation and Timing

FTC has asked if the new label should include information for consumers related to the transition between test procedures. AHRI suggests that the label only needs to include the information necessary to clarify the data provided on the label. The EnergyGuide label proposed by AHRI contains the correct information related to the test procedure transition by defining the bins, clearly stating water heaters should only be compared with other water heaters in the same bin, and showing all the bins on the First Hour Rating or Max GPM scale. A separate effort should be made, using other sources such as the FTC website, to educate consumer on the transition between test procedures.

AHRI requests that the previously provided EnergyGuide label developed by a committee of manufacturers be considered as an alternative to the label proposed by FTC in this NOPR. If FTC or other interested parties feel that the AHRI label required modifications, AHRI would like to work with FTC and interested parties to develop a label that is acceptable to all parties. For example, based on the sample proposed label included in the NOPR, it appears FTC would prefer to have the Estimated Yearly Energy Cost more prominent than the First Hour Rating.

The coordination of the implementation of revised water heater labels needs to be considered in conjunction with the upcoming transition to the new test procedure. A conversion factor final rule has not been issued by the DOE. Therefore, the UED metrics are not yet being used to determine compliance with the minimum efficiency standards nor are those UED metrics being reported to DOE. Ideally, the conversion factor final rule should be issued well in advance of May 1. In that case the Annual Report that is submitted to DOE and FTC on May 1 could include converted ratings reflecting the new test procedure even though manufacturers continued to display ratings based on the EF test procedure in their literature and on EnergyGuide labels. FTC could then use the

information provided to develop the ranges of comparability for each fuel type and usage bin and specify amended water heater labels. The implementation of the UEF ratings and revised FTC EnergyGuide labels should be coordinated so that the use of those efficiency descriptors as required by DOE, and the placement of amended EnergyGuide labels on residential water heaters occur at the same time. This will minimize the consumer confusion that results from the change to new efficiency metrics.

This NOPR does not include any mention of the newly established Grid-Enabled residential electric water heaters. These are a category of residential water heater which will require an EnergyGuide label. The definition of a Grid-enabled water heater in 10 CFR 430.2, includes a requirement for a label addressing the appropriate use of these water heaters. That information could be on a separate label or included on a proposed FTC EnergyGuide label. AHRI requests that FTC consider the potential need for these labels on subsequent information pertaining to this NOPR.

For the reasons outlined in these comments, AHRI requests that FTC delay the revision of the residential water heater EnergyGuide label regulations until a conversion factor final rule has been issued. Updates to the residential water heater labels should be completed through a separate rulemaking unencumbered by label changes addressing other products.

Conclusion

AHRI appreciates the opportunity to provide these comments. If you have any questions regarding this submission, please do not hesitate to contact me.

Sincerely,

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Attachment: AHRI Proposed FTC EnergyGuide Labels for Water Heaters

U.S. Government

Federal law prohibits removal of this label before consumer purchase.

ENERGYGUIDE

Water Heater - Natural Gas

Capacity (first hour rating): 70 gallons

XYZ CORPORATION

Model XYZ

Estimated Yearly Energy Cost

$233

$228 — $302

Cost Range of Medium Usage* Models

Your cost will depend on your utility rates and use.

First Hour Rating (Gallons)

70

Very Small Usage | Low Usage | Medium Usage | High Usage

0 — 125 +

First Hour Rating Range of Medium Usage* Models

The Department of Energy classifies storage tank water heaters by their first hour rating. A first hour rating is an estimate of the volume of heated water that a water heater can supply within an hour, starting from a fully heated condition. There are four categories of storage tank water heaters that correspond to different levels of first hour delivery:

Category	Range of First Hour Delivery (Gallons)		
Very Small Usage	0	to	17.9
Low Usage	18	to	50.9
*Medium Usage	51	to	74.9
High Usage	75	to	No Upper Limit

- **This water heater should only be compared to models in the Medium Usage category.**
- Cost range based only on models of similar capacity fueled by natural gas.
- Estimated energy cost based on a national average natural gas cost of $1.09 per therm.
- For more information, visit www.ftc.gov/energy.

U.S. Government

Federal law prohibits removal of this label before consumer purchase.

ENERGYGUIDE

Water Heater - Natural Gas

Capacity (max. flow rate): 3.5 gpm

XYZ CORPORATION

Model XYZ

Estimated Yearly Energy Cost

$233

$228 — $302

Cost Range of Medium Usage* Models

Your cost will depend on your utility rates and use.

Maximum GPM Rating (Gallons Per Minute)

3.5

Very Small Usage | Low Usage | Medium Usage | High Usage

0 — 5.2 +

Maximum GPM Rating Range of Medium Usage* Models

The Department of Energy classifies instantaneous water heaters by their maximum GPM (gallons per minute) rating. Maximum GPM means the amount of heated water (expressed in gallons per minute) that can be supplied while maintaining a temperature rise of 67F (37.3C) during steady state operation. There are four categories of instantaneous water heaters that correspond to different levels of Maximum GPM delivery:

Category	Range of Maximum GPM Ratings		
Very Small Usage	0	to	1.7
Low Usage	1.7	to	2.8
*Medium Usage	2.8	to	4.0
High Usage	4.0	to	No Upper Limit

- **This water heater should only be compared to models in the Medium Usage category.**
- Cost range based only on models of similar capacity fueled by natural gas.
- Estimated energy cost based on a national average natural gas cost of $1.09 per therm.
- For more information, visit www.ftc.gov/energy.