

DOCKETED

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On 2019 Title 24, Part 6, Building Energy Efficiency Standards Rulemaking

Additional submitted attachment is included below.



May 7, 2018

Via Email

Commissioner Andrew McAllister
California Energy Commission
Docket Unit, MS-4
1516 Ninth Street
Sacramento, CA 95814-5512

docket@energy.ca.gov

Re: Docket No. 17-BSTD-02 for 2019 Title 24, Part 6, Building Energy Efficiency Standards Rulemaking

Dear Commissioner McAllister,

Whirlpool Corporation appreciates the opportunity to comment on the 15-day language of the proposed 2019 Title 24, Building Energy Efficiency Standards, released on April 20, 2018.

Whirlpool Corporation is the world's leading major home appliance company, with approximately \$21 billion in annual sales, 92,000 employees and 70 manufacturing and technology research centers in 2017. The company markets Whirlpool, KitchenAid, Maytag, Consul, Brastemp, Amana, Bauknecht, Jenn-Air, Indesit and other major brand names in nearly every country throughout the world.

Section 150.0(o)1(G) - Kitchen Range Hoods Sound Rating

Whirlpool appreciates the Energy Commission's efforts to address manufacturer concerns regarding airflow and sound requirements for kitchen range hoods, as well as efforts to work with industry to correct remaining problems. We recommend the following change to the language in section 150.0(o)1 of the proposed code¹:

G. Kitchen range hoods shall be rated for sound in accordance with Section 7.2 of ASHRAE 62.2.

EXCEPTION to Section 150.0(o)1G: Kitchen range hoods may be rated for sound at **any speed that delivers 100 cfm or greater** ~~a static pressure determined at working speed~~ as specified in HVI 916 section 7.2.

According to ASHRAE 62.2 the sound measurement is conducted at an airflow rate of 100 cfm minimum that is measured at a pressure of 0.25 in w.g. The exception to allow HVI "Working Speed" modifies the test condition for airflow measurement to 0.03 in w.g (typical). Please see the graphical representation in Figure 1 below.

¹http://docketpublic.energy.ca.gov/PublicDocuments/17-BSTD-02/TN223257-2_20180423T083003_2019_Standards_Part_6_Chapter_7_Section_1500_Revised_Express_Te.pdf



The proposed modification would alter the language to allow for the acceptance of ratings conducted at a more stringent test condition, specifically 0.1 in w.g. This additional test condition is the standard condition under HVI 916 that is applied to the rating of the high speed and other designated speeds such as low speed and has available sound data.

A recent study of the HVI database showed approximately 28 percent of certified models to have a working speed rating, (please see Figure 2 below). An additional 14 percent have a low or medium speed rating. Most of these additional ratings comply with the 3 sone requirement for sound and exceed 100 cfm. The only difference is that they were tested at the higher pressure or merely rated at "Low" instead of "Working".

Whirlpool is participating in ongoing discussions with ASHRAE, HVI, and U.S. EPA regarding harmonization of the test conditions for kitchen range hoods.. Since the ASHRAE 62.2 sound requirement is presently at 0.1 in w.g. and the EPA has proposed this as a reporting level, it would provide harmonization and better guidance to a higher standard without additional test burden.

Section 150.0 (o)2(B) Kitchen Range Hood - Airflow Rating and Certification

The language in section 150.0(o)2(B) would require manufacturers to have all kitchen range hoods rated by HVI in order to be compliant with the code. We recommend the following changes to e to allow for the possibility of alternative certification options to be accepted by the Commission:

B Kitchen Range Hoods. The installed kitchen range hood shall be field verified in accordance with the procedures in Reference Residential Appendix RA3.7.4.3 to confirm the model is rated ~~by HVI~~ to comply with the following requirements:

- i. The minimum ventilation airflow rate as specified in Section 5 of ASHRAE 62.2 ~~when tested in accordance with HVI 916.~~

Conclusion

Whirlpool thanks the Commission for its efforts to work with industry to make improvements to the 2019 proposed building efficiency standards. While the proposed version takes steps in the right direction, we respectfully request your consideration of these proposed revisions to address the remaining significant problems for certification and field verification of kitchen range hoods. We greatly appreciate the opportunity to comment.

Please do not hesitate to contact me at eva.greene@whirlpool.com or 202-639-9420 if you have any questions or if I can provide additional information.

Sincerely,

Eva Greene
Government Relations Analyst
Whirlpool Corporation

Figure 1

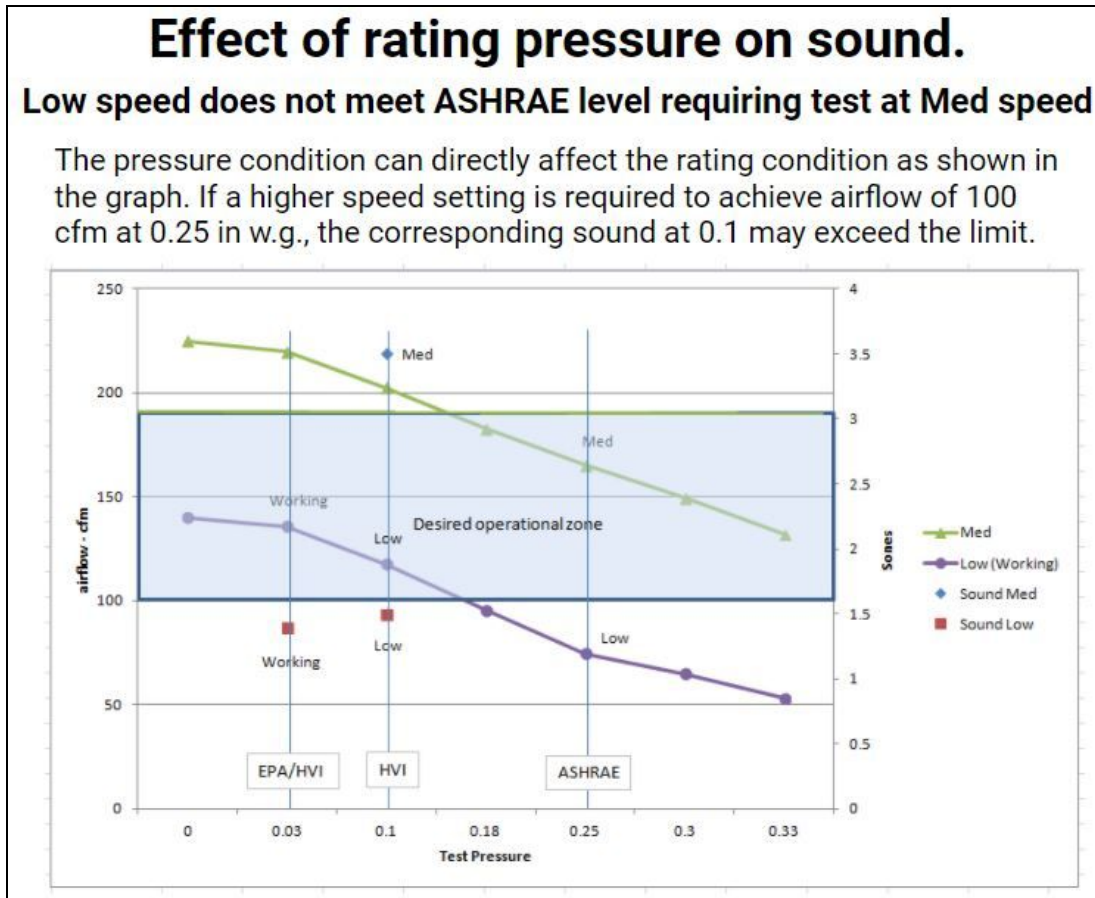


Figure 2

From the HVI database, sampled February, 2018

Total Unique Models	1441	% of total
Models w/WS >100	404	28%
Models w/ WS <100	2	
Models w/ LS >100	177	12%
Models w/ LS <100	20	
Models w/ MS >100	31	2%
Ratings >100 cfm	612	42%