DOCKETED	
Docket Number:	18-AAER-06
Project Title:	Hearth Products
TN #:	223776
Document Title:	ASAP NRDC Comments on Hearth Products
Description:	N/A
Filer:	System
Organization:	Appliance Standards Awareness Project (ASAP), and Natural Resources Defense Council (NRDC)
Submitter Role:	Public
Submission Date:	6/11/2018 4:10:45 PM
Docketed Date:	6/11/2018

Comment Received From: Joanna Mauer
Submitted On: 6/11/2018
Docket Number: 18-AAER-06

ASAP NRDC Comments on Hearth Products

Additional submitted attachment is included below.

Appliance Standards Awareness Project
Natural Resources Defense Council

June 11, 2018

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

RE: Docket No. 18-AAER-06: Hearth Products

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP) and Natural Resources Defense Council (NRDC) on the California Energy Commission's (CEC's) Notice of Invitation to Comment on Hearth Products. We appreciate the opportunity to provide input to the Commission.

ASAP is a coalition that includes representatives of efficiency, consumer and environmental groups, utility companies, state government agencies, and others. Working together, the ASAP coalition seeks to advance cost-effective efficiency standards at the national and state levels through technical and policy advocacy and through outreach and education.

NRDC is an international nonprofit environmental organization with more than 1.3 million members and online activists. Since 1970, NRDC's lawyers, scientists, and other environmental specialists have worked to protect the world's natural resources, public health, and the environment. NRDC's top institutional priorities are curbing global warming and creating a clean energy future. Energy efficiency is one of the quickest, cleanest, cheapest solutions to global warming and other energy-related problems. Cost-effective energy efficiency standards help to ensure that consumer and commercial products provide the same level of comfort and service using less energy, with benefits for consumers, the environment and the electricity grid.

As CEC notes in the Notice, the U.S. Department of Energy (DOE) proposed standards for hearth products in a notice of proposed rulemaking (NOPR) in 2015,[1] but did not complete the rulemaking. Therefore, the time is ripe for CEC to consider standards for these products.

We encourage CEC to adopt the recently established British Columbia (B.C.) standards for hearth products, but to expand the scope to include all types of products covered in DOE's NOPR. The B.C. standards, which will take effect on January 1, 2019, prohibit standing pilot lights in all vented gas fireplaces and require that vented gas fireplace heaters meet a minimum fireplace efficiency (FE) of 50% based on the CSA P.4.1-15 test procedure.[2] The products covered in DOE's NOPR include gas fireplaces/inserts/stoves, gas log sets, and outdoor products (e.g. outdoor fireplaces, patio heaters).[3] Prohibiting standing pilot lights in all hearth products sold in California would eliminate a significant source of energy waste, and a minimum heating efficiency requirement for heaters would ensure that hearth products that are intended to be used as a heat source provide a minimum level of efficiency.

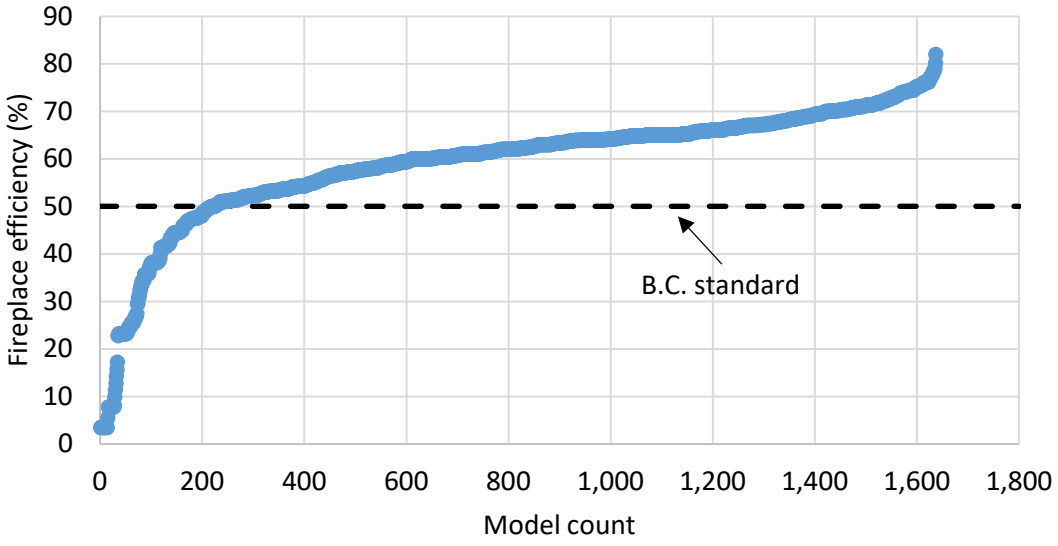
[1] https://www.regulations.gov/document?D=EERE-2014-BT-STD-0036-0010.
[2] https://www.teca.ca/docuploads/news-and-events/1520799795_1.pdf.
[3] We understand that ventless products are banned in both California and Canada.

Further, expanding the scope of these requirements to include all types of products covered in DOE's NOPR would increase savings for California.

Eliminating standing pilot lights in all hearth products would achieve significant energy savings for California and energy bill savings for California consumers. DOE estimated that in 2021, 42% of shipments of vented gas fireplaces, 88% of vented gas log sets, and 52% of outdoor products will have standing pilot lights.[4] DOE also estimated that typical standing pilot lights have an input capacity of about 1 kBtu/h.[5] A survey conducted by Lawrence Berkeley National Laboratory (LBNL) of hearth products in U.S. homes found that of those consumers with hearth products that have standing pilot lights, 35% always leave the pilot light on, and another 32% only turn off the pilot light during the summer. LBNL estimated that on average, standing pilots are on for 4,593 hours per year.[6] Therefore, for hearth products with standing pilot lights, the average annual energy use of just the standing pilot is about 4.6 MMBtu/year, which translates to about $55/year.[7]

Adopting the B.C. fireplace efficiency (FE) standard for hearth products that are heaters would eliminate the least-efficient models. Figure 1 shows the rated FE of gas fireplace models in the NRCan database tested using the CSA P.4.1-15 test procedure.[8] Of the more than 1,600 models listed in the database, 87% have an FE of at least 50%.

Figure 1. Fireplace efficiency (FE) of each of the models in the NRCan database[9]



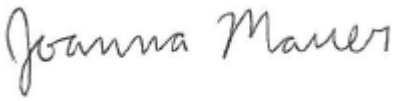
[4] https://www.regulations.gov/document?D=EERE-2014-BT-STD-0036-0002. p. 8-28. Excluding match-lit units.
[5] https://www.regulations.gov/document?D=EERE-2014-BT-STD-0036-0002. p. 7-6.
[6] https://eta.lbl.gov/sites/default/files/publications/lbnl-2001030.pdf. pp. 41-42.
[7] Based on $12.51 per thousand cubic feet, which was the average residential natural gas price for California in 2017: https://www.eia.gov/dnav/ng/ng_pri_sum_dcu_SCA_a.htm.
[8] CSA P.4.1-15 – *Testing method for measuring annual fireplace efficiency*.
[9] http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.search-recherche&appliance=FIREPLACE_G. Accessed June 7, 2018. For models listed with different FE values for natural gas and propane, we selected the lower of the two.

Data from the U.S. also indicate wide availability of products that meet the B.C. standard. Multiple utilities in the U.S. offer rebates for gas fireplaces with an FE of at least 70%.[10] The Energy Trust of Oregon also offers a higher incentive for models with an FE of at least 75%. They have a qualifying product list that contains 148 models from 15 manufacturers with an FE rating of at least 75%. Another 169 models are listed with an FE rating between 70% and 74.9%.[11] The most efficient products have an FE of more than 90%.[12]

Eliminating standing pilot lights in all hearth products and requiring a minimum FE of 50% for products that are heaters would be cost-effective for California consumers. DOE found that for a standard eliminating standing pilot lights, average life-cycle cost (LCC) savings for all consumers would be $165.[13] We note that because DOE's estimate included consumers who would be unaffected by the standard (i.e. who would purchase a product without a standing pilot light even in the absence of a standard), the LCC savings for affected consumers would be significantly greater.[14] DOE also estimated a simple payback period of 2.9 years, which is significantly shorter than the average 15-year lifetime of hearth products.[15] We believe that requiring a minimum FE of 50% for products that are heaters would have minimal cost implications for consumers since, as described above, the vast majority of current products already meet this efficiency level. In the analysis supporting the development of the B.C. standard, it was assumed that a FE of 50% represented the baseline energy performance level.[16]

Thank you for considering these comments.

Sincerely,



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[10] See, for example: https://www.energytrust.org/incentives/gas-fireplaces/#tab-two; http://www.cngconserve.com/wp-content/uploads/2016/06/CNG-IncentiveProgram-IncentiveList-022317.pdf; https://pse.com/savingsandenergycenter/Rebates/Heating/Pages/Fireplace-rebate.aspx.
[11] https://www.energytrust.org/wp-content/uploads/2016/09/hes_lt_qualified_gasfireplaces.pdf.
[12] Models BF28BMK and BP28BMK have an FE rating of 90.5.
[13] https://www.regulations.gov/document?D=EERE-2014-BT-STD-0036-0002. p. 8-30.
[14] Average LCC savings for affected consumers would be equal to the difference in LCC for a baseline product at EL 0 ($769) and a compliant product at EL 1 ($442), or about $327.
[15] https://www.regulations.gov/document?D=EERE-2014-BT-STD-0036-0002. p. 8-30.
[16] https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/energy-efficiency/mem_eesr_ris_gas_fireplaces_september_27_2016.pdf. p. 6.