Energy Conservation Program: Updating And Improving the DOE Methodology for Assessing the Cost-Effectiveness of Building Energy Codes

COMMENTS OF THE AMERICAN GAS ASSOCIATION

Introduction

The American Gas Association (AGA) is pleased to submit comments in response to the Request For Information (RFI) issued by the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy (the Department), in the Federal Register on April 14, 2015, seeking information from the public on how it may update and improve its methodology for assessing the cost-effectiveness (which includes an energy savings assessment) of residential and commercial building energy codes.

The AGA, founded in 1918, represents more than 200 local energy companies that deliver clean natural gas throughout the United States. There are more than 71 million residential, commercial and industrial natural gas customers in the U.S., of which 92 percent — more than 65 million customers — receive their gas from AGA members. AGA is an advocate for local natural gas utility companies and provides a broad range of programs and services for member natural gas pipelines, marketers, gatherers, international gas companies and industry associates. For more information, please visit www.aga.org. Below is a summary of our comments on the RFI.

Marginal Energy Rates for Determining Cost Savings

While the Department is moving toward consumer marginal energy rates as the prices to consider for returns to consumers on energy savings in appliance and efficiency rulemakings, we believe that the Department must also include marginal energy rates in determining cost savings of efficiency improvements in homes and buildings. Using marginal energy rates will provide a more accurate measure of cost savings that may result from the efficiency improvement being considered. The development of a realistic and accurate marginal energy rates procedure needs to be developed and made publically available by DOE in order to help ensure that any energy savings determinations are realistic and not over or understated because of the use of inappropriate energy prices.
Baseline Efficiency Levels

In establishing the baseline of the cooling, heating and water heating appliances and equipment in the Prototype Characteristics, DOE should not use the minimum efficiency requirement of the specific appliance or equipment as the baseline but should move toward an average efficiency of the specific product type as the baseline. For example, approximately 50% of the non-weatherized gas furnaces shipped today are rated at 90% AFUE or better, with the remaining rated at 80% AFUE. If DOE uses the minimum efficiency level of 80% AFUE as the baseline, improvements in overall energy saving by referencing the low baseline will be overstated since approximately 50% of the gas furnaces installed will have efficiency ratings exceeding 90% AFUE or greater. A solution to this issue would be to redefine the baseline efficiency level as a shipment weighted average. Thus in the case of non-weatherized gas furnaces, the baseline would be set at 85% AFUE and realistic efficiency improvements would be determined from the average baseline.

Total Projected Amount of Energy Savings

As part of an analysis supporting a review of an efficiency improvement, a clear and consensus-based analysis of potential energy savings should be completed before proceeding with a declaration of cost effectiveness or not. All projected energy savings should be equally represented in site energy savings and in full-fuel-cycle (FFC) savings as called for under the Department’s FFC Policy Statement. While the FFC Policy Statement is directed at appliance standards, the same philosophy needs to be applied to determining energy savings for residential and commercial buildings because without such a determination, the overall, more accurate energy savings cannot be determined if only site energy savings is determined. The Department’s decision whether to except an energy efficiency improvement as valid or not needs to be evaluated both on a source and site basis. Otherwise one could conclude in a mixed home or building application (gas heating and water heating) replacing the natural gas equipment with all electric would most likely show a reduction of site energy but in most situations would result in an increase of source energy.

AGA thanks the Department for its consideration of these comments. Please do not hesitate to contact us if you would like to further discuss our comments and recommendations.

Respectfully submitted,

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