



June 6, 2016

Mr. Hampton Newsome
Attorney, Division of Enforcement, Bureau of Consumer Protection
Federal Trade Commission
Office of the Secretary
600 Pennsylvania Avenue, NW.
Suite CC-5610 (Annex E)
Washington, DC 20580

Docket Number: 16 CFR Part 460 – R-value Rule Review, File No. R811001
RIN: 3084-AB40

Dear Mr. Newsome:

This letter comprises the comments of the Pacific Gas and Electric Company (PG&E), Southern California Gas Company (SoCalGas), San Diego Gas and Electric (SDG&E), and Southern California Edison (SCE) in response to the to the Federal Trade Commission’s (FTC’s) Notice of Proposed Rule (NOPR) on the “Trade Regulation Rule Concerning the Labeling and Advertising of Home Insulation” (the “R-value Rule”).

The signatories of this letter, collectively referred to herein as the California Investor Owned Utilities (CA IOUs), represent some of the largest utility companies in the Western United States, serving over 35 million customers. As energy companies, we understand the potential of appliance efficiency standards and labeling requirements to cut costs and reduce consumption while maintaining or increasing consumer utility of the products. We have a responsibility to our customers to advocate for standards and requirements that accurately reflect the climate and conditions of our respective service areas, so as to maximize these positive effects.

We appreciate the opportunity to provide the following recommendations and revisions to the NOPR. We commend FTC and Department of Energy (DOE) in efforts to improve the insulation labels. We offer the following support and recommendations in response to FTC’s questions for stakeholder input.

1) The CA IOUs support the requirements of the R-value Rule because labeling insulation’s R-value aids inspectors in verifying if a building complies with the current code.

When the R-value of insulation is clearly labeled and accessible, there is greater compliance to building energy efficiency codes related to insulation. For example, California’s 2016 Title 24 Residential Compliance Manual requires that “the insulation contractor documents the insulation installation quality features that have been followed as shown on the CF2R checklist,” as shown in Figure 1, and a building official needs to “visit a site multiple times during construction” to verify compliance with the building code (California Energy Commission 2016). The inspection process is simplified and leaves less room for error when the R-value is clearly labeled on the insulation as well as the manufacturer’s fact sheets. Figure 1 shows a section from California’s Title 24 Certificate of Installation for Insulation (Title 24 CF2R), which demonstrates the need for clearly marked R-values on insulation since the building official

must document each area’s insulation R-values. In addition, the R-value of insulation is an important component of the energy efficiency calculations for new construction homes and retrofits in California.

Figure 1: Title 24 CF2R Insulation Installation Form Example (Revised 09/15)

A. Roof/Ceiling Insulation									
01	02	03	04	05	06	07	08	09	10
I.D.	Manufacturer & Brand	Framing Material	Framing Size & Spacing	Insulation Type	ESR Number	Cavity Insulation R-value	Insulation Depth (inches)	Above Deck Insulation R-value	Below Deck Insulation R-value

B. Wall Insulation									
01	02	03	04	05	06	07	08	09	10
I.D.	Manufacturer & Brand	Framing Material	Framing Size & Spacing	Insulation Type	ESR Number	Cavity Insulation R-value	Insulation Depth (inches)	Exterior Wall Insulation R-value	Interior Wall Insulation R-value

C. Mass Insulation							
01	02	03	04	05	06	07	08
I.D.	Manufacturer & Brand	Location	Mass Thickness (inches)	Furring Strip Type/ Depth (inches)	Insulation Type	Exterior Insulation R-value	Interior Insulation R-value

D. Raised Floor Insulation									
01	02	03	04	05	06	07	08	09	10
I.D.	Manufacturer & Brand	Framing Material	Framing Size & Spacing	Insulation Type	ESR Number	Cavity Insulation R-value	Insulation Depth (inches)	Exterior Floor Insulation R-value	Interior Floor Insulation R-value

E. Slab Floor/Perimeter Insulation (See F. for Insulation Requirements for Heated Slabs)							
01	02	03	04	05	06	07	08
I.D.	Manufacturer & Brand	Floor Type	Insulation Type	Insulation Depth (inches)	Insulation R-Value	Vertical Insulation Length (inches)	Horizontal Insulation Length (feet)

Source: California Energy Commission 2013.

- The CA IOUs further support the R-value Rule because consumers benefit greatly from being able to clearly identify and compare the R-value, or insulating power, of different insulation options.**

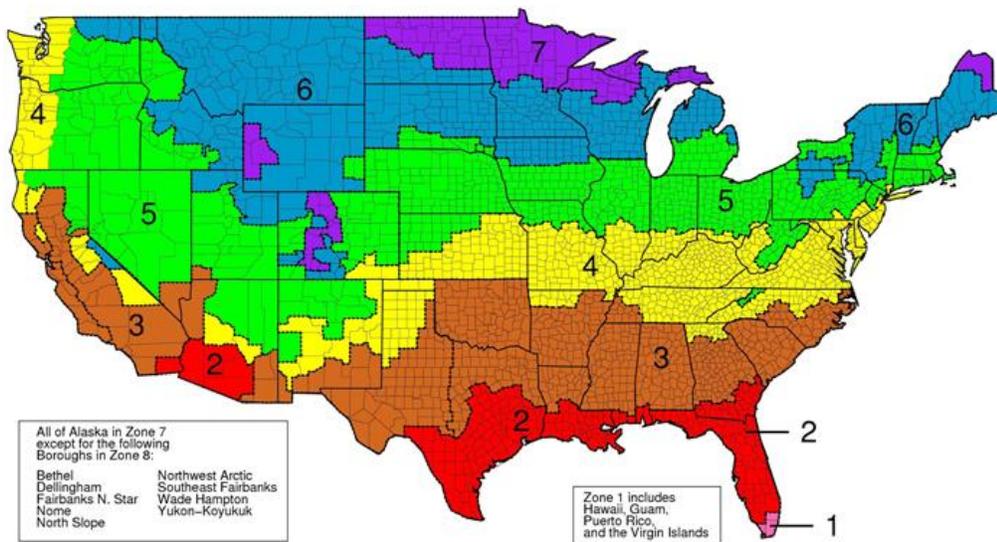
Consumers who purchase insulation from large retailers or online benefit from having the R-value on package labels because without the R-value, consumers would have a difficult time understanding the insulating power of the product they are purchasing. Clearly marked products make it easier for consumers to make educated purchases, especially when considering the benefits of energy savings and increased home comfort from insulation with a higher R-value.

- The CA IOUs support the R-value Rule’s requirements for energy savings claims because insulation is a cost-effective way to reduce buildings energy bills, increase home comfort, and ultimately reduce greenhouse gas emissions.**

We support FTC’s R-value Rule requirement to have “a reasonable basis” for energy claims made on insulation labels, ads, or additional promotional materials to ensure consumers receive accurate

information to aid their purchasing decisions (*See* § 16 CFR 460.19).¹ Insulation is one of the most cost-effective energy efficiency measures, and insulation benefits consumers through reduced utility bills and increased home comfort. According to Residential Energy Consumption Survey (RECS), the average United States (U.S.) household spends approximately \$2,024 per year on energy bills (Residential Energy Consumption Survey 2009). Depending on the climate zone, insulating the attic, air sealing, and insulating the floor, basement, or crawlspace can reduce residential utilities bills by 5 to 16 percent (ENERGY STAR 2014). Table 1 shows the estimated annual utility bill savings from home sealing and insulating by U.S. climate zones, which are illustrated in Figure 2. The typical U.S. household could save an average of \$222 per year on utility bills with insulation upgrades (Residential Energy Consumption Survey 2009). The payback period for insulating a building's attic and walls is between 3 ½ to 12 years, depending on the climate zone (Department of Energy 2013). More severe climates will have shorter paybacks and milder climates will have longer paybacks. This reduced energy demand ultimately decreases greenhouse gas emissions.

Figure 2: Continental U.S. Climate Zone Map



Source: Oak Ridge National Laboratory 2008.

¹ 16 CFR 460.19. *Savings Claims*. <https://www.law.cornell.edu/cfr/text/16/460.19>.

Table 1: Estimated Savings from Home Sealing and Insulating

Location	Climate Zone	Estimated Annual Utility Bill Savings (%)		
North	CZ 8	Total House	16%	
		Heating and cooling only	18%	
	CZ 7	Total House	15%	
		Heating and cooling only	19%	
	CZ 6	Total House	14%	
		Heating and cooling only	18%	
	CZ 5	Total House	12%	
		Heating and cooling only	16%	
	CZ 4C	Total House	13%	
		Heating and cooling only	20%	
	CZ 4	Total House	12%	
		Heating and cooling only	17%	
	South	CZ 3	Total House	8%
			Heating and cooling only	14%
CZ 2		Total House	6%	
		Heating and cooling only	9%	
CZ 1		Total House	5%	
		Heating and cooling only	7%	
National Average	Total House	11%		
	Heating and cooling only	15%		

Source: ENERGY STAR 2014.

4) The CA IOUs recommend FTC expand upon the current requirements for insulation labels to include a statement about the negative consequences of poorly installed insulation.

The installation quality of insulation affects the energy performance of buildings. We recommend the label alert consumers about the potential decrease in energy savings due to poor installation such as missing insulation, gaps, or compression. For example, the label could include the following sentence: “Consumers should be aware that insulation must be installed properly to maintain its rated performance; poorly installed insulation will reduce the rated R-value and negatively impact the thermal performance of the building.”

In addition to reducing a building’s potential energy savings, installation of insulation that does not follow the manufacturer’s installation instructions is a building code violation. Section C303.1 of the 2012 International Energy Conservation Code states “all materials, systems and equipment shall be installed in accordance with the manufacturer’s installation instructions and the *International Building Code*” (International Code Council 2012).

Residential Energy Services Network (RESNET) developed a grading scale to help identify the quality of insulation installation. Insulation that is Grade I installation is “generally installed according to manufacturer’s instructions and/or industry standards,” Grade II is installed “with moderate to frequent installation defects including gaps around wiring, electrical outlets, plumbing and other intrusions,” and Grade III is installed “with substantial gaps and voids, with missing insulation amounting to greater than 2% of the area, but less than 5% of the surface area is intended to occupy” (Conservation Services Group, Inc. 2008). A contractor’s poor installation quality of insulation will affect the rated R-value. For example, if a contractor leaves a 5 percent gap when installing fiberglass insulation in a wall, the wall’s R-value will be lowered more than 5 percent because “gaps in fiberglass insulation have a disproportionate effect on thermal envelop performance” (Holladay 2009). If a contractor does not install

cellulose insulation to account for the settling which occurs over time, there will be a decrease in R-value. Cellulose insulation's packaging thus needs to clearly state that it should be installed to the "correct depth, after settling, to achieve desired R-value" (Cellulose Insulation Manufacturers Association). All insulation product labels need to alert both the consumer and/or contractor that incorrectly installing the insulation can result in a lowered R-value, which in turn reduces the potential energy saving and home comfort.

5) The CA IOUs recommend FTC communicate with manufactures of insulation to ensure new insulation products meet the R-value Rule requirements.

Currently, the R-value Rule requirements apply to "any material mainly used to slow down heat flow," unless specifically exempted (*See* § 16 CFR 460.2).² We urge FTC to coordinate with insulation manufactures on a regular basis to ensure compliance of the labeling requirements adopted in the final R-value Rule. Better coordination with manufacturers will address issues of whether or not a specific product is subject to the mandatory regulation and prevent insulation products sold without a labeled R-value.

In conclusion, we would like to reiterate our support to FTC for establishing labeling requirements for residential insulation. We thank FTC for the opportunity to be involved in this process and encourage FTC to carefully consider the recommendations outlined in this letter.

Sincerely,

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² 16 CFR 460.2. *What is Home Insulation.* <https://www.law.cornell.edu/cfr/text/16/460.2>.

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