Johns Manville

A Berkshire Hathaway Company

325 Industrial Drive
Fernley, NV 89408
(775) 575-4150
www.jm.com

RECEIVED
MAR 17 2014
NEVADA STATE OFFICE
OF ENERGY

March 14, 2014

Director Paul Thomsen
Governor's Office of Energy
755 North Roop Street, Suite 202
Carson City, Nevada 89701

Dear Director Thomsen;

On behalf of Johns Manville and our 30 Nevada employees, I want to commend your office for starting its review of the 2012 International Energy Conservation Code (IECC). Johns Manville strongly supports state adoption of the 2012 IECC without weakening amendments. An updated building energy code will result in significant energy and cost savings for Nevada building owners and occupants and will have a positive impact on employment here as well.

This is certainly a win-win for Nevada residents and businesses, including our polyiso foam insulation manufacturing facility in Fernley, Nevada. The enclosed comments that our trade association, the Polyisocyanurate Insulation Manufacturers Association (PIMA), submitted contains a thorough explanation of these benefits but I note here that the 2012 IECC will increase the use of the very product we make in Fernley.

I urge you to resist amendments whose purposes are not to address some unique state-specific issue, but instead aim to weaken the code. Many of these weakening amendments have been proposed at earlier IECC proceedings and were rejected by the state and local code officials and other stakeholders charged with developing a uniform and cost effective code. Following the initial rejection by the national model code body, the sponsors are now engaged in a type of forum shopping.

For example, the proposed amendment that would permit trade-offs involving the heating and cooling equipment has been repeatedly rejected at the national level for three code cycles (i.e., 2009, 2012, and 2015) and at numerous state adoption proceedings. At this point, most states have adopted either the 2009 or 2012 IECC and have rejected this weakening amendment. The equipment trade-off proposal would allow installation of less efficient windows, reduced insulation levels, or increased infiltration in exchange for installing heating and cooling equipment whose efficiency levels are already the market norm. We also question the wisdom of trading the efficiency levels of components that are likely to be in place for the life of the home for efficiency levels of components with relatively short lives, such as heating and cooling equipment. The adoption of this amendment would reduce the effectiveness of the IECC to pre-2009 levels, so it would be a step backwards for Nevada and would result in lower quality construction and higher energy bills.

Adopting the 2012 IECC would also change the wall insulation requirements for Clark County to match the requirements that have been in place for the rest of the state since Nevada

adopted the 2009 IECC. We think this consistency throughout the State will make the code easier to administer and it will have a positive impact for home owners in Clark County.

Sincerely,

Jared Kerney
Plant Manager

Enclosure

January 15, 2014

Director Paul Thomsen
Governor's Office of Energy
755 North Roop Street, Suite 202
Carson City, Nevada 89701

PIMA
POLYISOCYANURATE INSULATION MANUFACTURERS ASSOCIATION

Re: Adoption of the 2012 International Energy Conservation Code (IECC)

Dear Director Thomsen,

The Polyisocyanurate Insulation Manufacturers Association (PIMA) would like to take this opportunity to comment on Nevada's review and adoption of an updated building energy code. PIMA supports your efforts to strengthen the State's code and urges you to adopt the 2012 IECC for commercial and residential buildings without weakening amendments. Adoption of the 2012 IECC would assure solid, cost-effective, and energy-efficient construction practices for Nevada residents and businesses. Adoption would help to make homes more affordable to own and operate and Nevada businesses more competitive.

New Residential and Commercial Building Construction

Adopting the 2012 IECC as part of the Nevada building code would provide many benefits and/or protections for the home or building owner, including:

- Improved thermal performance for the walls, ceiling and floors;
- Improved window efficiency;
- Reductions in wasted energy from leaky heating and cooling ducts;
- High-efficiency lighting; and
- Improved air sealing of the building envelope.

Residential and commercial buildings are responsible for 41% of the total U.S. energy use, so it is essential for Nevada to address building construction practices as part of its energy policy objectives and goals. Building energy codes are the most effective tool for reducing energy use in buildings and making our homes and commercial buildings less expensive to operate.

According to the U.S. Department of Energy (DOE), Nevada homes would use 25.9% less energy under the 2012 IECC as compared to the current Nevada code (i.e., the 2009 IECC). DOE also finds that the net annual consumer savings (which includes energy savings, change in mortgage payments, and other costs) would average $214 and homeowners would see a net

7315 Wisconsin Avenue
Suite 400E
Bethesda, Maryland 20814
301-654-0000
www.polyiso.org

POLYISO™
The top performer.

positive cash flow within two years.[1] DOE has not completed a separate calculation of energy savings with respect to commercial buildings in Nevada, but for the nation as a whole the savings resulting from adoption of the 2012 IECC (or ASHRAE Standard 90.1-2010) would average 18.5%.[2]

The Pacific Northwest National Laboratory (PNNL) recently completed an economic analysis that highlights the positive impact that an updated code would have on employment in the state. According to this study 850 new jobs would be created as a result of the effect the new standards have on home construction practices. In addition to the additional jobs related to home construction, there would also be an increase in jobs that result from spending that is diverted from energy bill payments to spending that has a greater economic impact on the state. This improvement in employment is cumulative and starts at 75 new jobs the first year after the new code is in place and grows by that amount each year. The result after 10 years would be 750 new jobs, assuming a constant rate of new home construction.[3] This information also reminds us that having an energy-efficient housing stock with lower utility bills will help Nevada citizens weather the next home foreclose crisis. The PNNL report only looks at the economic effects for residential construction, but similar positive employment impacts would be expected from the commercial sector as well, so the total impact will be much larger.

Alterations to Existing Buildings

Many of the IECC's energy saving requirements for new buildings also apply to alterations in existing buildings, an important feature of the model energy codes that has been in place since the years 1999 and 2000. The application of energy codes to alterations is important for two principle reasons. First, most buildings were constructed under relatively weak or nonexistent state and/or local energy codes, so these older buildings offer an important opportunity for increased energy savings.[4] The most effective time to take advantage of these opportunities is during an alteration or renovation. Second, as with new construction, the application of codes to alterations helps to overcome market barriers to energy efficient building practices, such as the presence of split incentives and the emphasis on first-cost considerations over long-term energy savings.

---

1 U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, June 2012, Nevada Energy and Cost Savings for New Single-and Multifamily Homes: 2012 IECC as Compared to the 2009 IECC.

2 Department of Energy, Building Energy Standards Program: Final Determination Regarding Energy Efficiency Improvements in the Energy Standard for Buildings, Except Low-Rise Residential Buildings, ANSI/ASHRAE/IESNA Standard 90.1-2010; October 19, 2011; 76 FR 64904.

3 Pacific Northwest National Laboratory, Potential Job Creation in Nevada as a Result of Adopting New Residential Building Energy Codes, MJ Scott and JM Niemeyer, September 2013.

4 Median life for most building categories ranges between 50 and 65 years. Over 50% of the existing commercial floor space was built prior to 1980. 2011 Building Energy Data Book, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, pages 3-10 (table 3.2.6) and 3-4 (table 3.1.8), respectively.

The ASHRAE Standard 90.1 and IECC requirements related to alterations are focused and relatively limited compared to the requirements for new construction. They do not apply to every type of alteration and, for the alterations that are covered, they only apply to the components or equipment that is new or being replaced. Also, the requirements for alterations only apply in instances where the code setting bodies believe compliance with the standard is cost effective and technically feasible. For example, when a commercial building removes the old roof covering and replaces it with a new membrane, the insulation underneath that membrane should be brought up to current standards, or even replaced if it is wet or otherwise damaged (IECC (2012) sections section C401.2.1 and C101.4.3, exception 5, and IBC (2012) section 1510.3).

Information about the Polyisocyanurate Insulation Manufacturers Association (PIMA)

PIMA is the trade association for manufacturers of rigid polyiso foam insulation, a product that is used in most low-slope commercial roofs as well as in commercial and residential walls. PIMA members have a nationwide presence with manufacturing facilities located across the United States, including: 31 polyiso plants, numerous facilities that produce the raw materials used in polyiso manufacturing, and plants that produce roof membranes, metal flashings and other products essential to building construction. PIMA members with facilities located in Nevada include: Rmax (polyiso insulation manufacturing facility in Fernley); Firestone Building Products Company (thermoplastic roof membrane manufacturing facility in North Las Vegas and a metal manufacturing plant in Reno); and Johns Manville (polyiso insulation manufacturing facility also in Fernley). These Nevada employers fully support your efforts to adopt the 2012 IECC without changes.

I hope this information will be helpful in your deliberations. Please contact me if you have any questions.

Sincerely,

Jared O. Blum
President