



November 13, 2017

Commissioner Steve Milby  
Department of Housing, Buildings and Construction  
101 Sea Hero Rd., Ste. 100  
Frankfort, KY 40601

RE: Commercial Energy Code Change

Dear Commissioner Milby:

This letter is to express our support for maintaining Kentucky's commercial energy codes at the current level of the 2012 IECC.

It has come to our attention that the Department of Housing, Buildings, and Construction is considering rolling back the current commercial energy codes. When the 2012 IECC model energy code was adopted in 2014, it passed largely unopposed, with almost no discussion. There is no national precedence for a state rolling back their energy codes. The Louisville Energy Alliance (LEA) Board of Directors is very concerned about this proposed code change. We work directly with building owners and facility managers, and we understand how this would impact their bottom line.

A rollback of the energy codes will increase utility costs of new buildings an estimated \$1.5 million per year, impacting owners and occupants. Energy efficiency helps drive our economy forward with new and better technology, helping businesses operate more efficiently and helping them stay competitive.

One of Kentucky's key economic advantages has always been historically low electric rates. While other states continue to upgrade their energy codes, Kentucky's attempts to roll back to an older code will put our businesses at an economic disadvantage. We would essentially be conceding one of our key economic advantages by burdening businesses with higher electric bills in an attempt to shave marginal dollars off the front end of construction costs. We know the utility savings of these buildings will pay for themselves in a few short years. In contrast, businesses affected by a decision to roll back commercial energy codes will feel this impact for decades to come.

In many ways, energy codes help protect owners who are not aware of how decisions in the design and construction of their facilities will impact their business and the environment for years to come. Without a strong code, it becomes very easy for an owner to be sold on lower cost without understanding of the consequences and or financial impacts. By setting a minimum standard that is a high, but reasonable standard, the leadership of the Commonwealth of Kentucky would be helping to protect businesses for years to come.

While the energy code roll back may be envisioned as a way to streamline business and construction, it may actually have the opposite intended effect. Most equipment providers, as well as design and construction firms, have moved on to the newer energy codes; likewise, code inspectors will have to be

retrained to the older code – especially newer inspectors. This will likely cause considerable added bureaucracy and confusion in the market place as these codes are revised.

If the Department of Housing, Buildings, and Construction is considering any change to the current commercial energy codes, the Louisville Energy Alliance would prefer codes that requires buildings to be more energy efficient. If Kentucky were able to offer low energy costs with high performing buildings, our economy would benefit.

The attached document further articulates a range of issues related to the proposed rollback of the commercial energy codes. We sincerely hope you and your team will reconsider your proposed changes to the commercial energy code.

Sincerely,

A handwritten signature in black ink, appearing to read "Kurt Barrett". The signature is fluid and cursive, with a prominent initial "K".

Kurt Barrett  
Chair, Board of Directors  
Louisville Energy Alliance

Enclosure:      Kentucky Commercial Energy Code Rollback

## Kentucky Commercial Energy Code Rollback

Building energy codes have consistently proven to be a cost-effective policy to create healthier and more comfortable indoor environments, while reducing energy consumption and saving consumers money on their utility bills.

### Economic Impact:

Since the implementation of the commercial 2012 International Energy Conservation Code (IECC) in October 2014, Kentucky consumers have saved over \$12 million in energy costs. If the commonwealth were to rollback and adopt the 2009 IECC, commercial buildings built to the older standard would use over 18% more energy than the current standard, and would cost building owners an average of \$2.70 more psf over the first 30 years of operation, according to a DOE analysis<sup>i</sup>. This would result in a statewide **increased cost to consumers of approximately \$1.5 million per year**. This will put Kentucky businesses at a competitive disadvantage by increasing their utility costs, offsetting one of Kentucky's traditional advantages – our low electric rates.

### Impact on Specific Building Types:

According to a DOE analysis<sup>i</sup>, out of the following building types, Kentucky schools would bear the biggest energy cost increase with a rollback to the 2009 IECC. With fixed public budgets, school districts are expecting that a newly built school will meet the same minimum level of efficiency over the past three years. Kentucky schools have been recognized as leaders in energy efficiency across the US and by rolling back to the 2009 IECC school districts will find it more difficult to continue to lead.

Building Type	Increased Energy Cost
Small Office	18.2%
Large Office	11.0%
Stand-Alone Retail	17.0%
Primary School	20.1%
Small Hotel	9.4%
Mid-Rise Apartment	4.6%

### Increased Demand on the Grid:

It is estimated that adopting the 2009 IECC to regulate commercial buildings will increase energy use by over 11,000 MWh and 300,000 Therms, annually. Energy efficiency is the least cost resource for utilities, and a reduction in code efficiency would increase peak energy demand, potentially requiring the need for more electric generation. Costs associated with increased electricity peaks would ultimately be passed on to consumers in Kentucky.

### **Confusion in the Marketplace:**

Given that the 2012 IECC has been in effect for almost three years, the building industry has already changed their construction practices to comply with the provisions in the 2012 IECC. Thus, adopting the 2009 IECC would not significantly decrease construction costs as the market has shifted. **This change would instead create confusion and additional work for code officials, architects, engineers and builders.**

### **Bad for Kentucky Businesses:**

Manufacturers and supply houses base their product offerings and supply off the prevailing energy code. Most of these companies have already moved on to providing equipment that meets the 2012 or 2015 IECC (for surrounding states) requirements. Expecting them to produce or warehouse materials for older standards could produce an undue financial burden on Kentucky companies.

### **Comparison to other States:**

Neighboring states, and states across the Midwest, continue to update their commercial energy codes to ensure the health, productivity, and cost saving benefits of energy efficiency for all their citizens. In the last two years, Illinois, Michigan and Ohio have recognized the importance of updating their commercial energy code to the 2012 IECC, or 2015 IECC. If Kentucky reverts to the 2009 IECC for commercial buildings, **Kentucky would be the first state in the nation to scale back code adopted minimum building efficiency requirements.**

### **2009 IECC is Outdated:**

Building codes are typically updated every three years. The 2018 IECC/ASHRAE 90.1-2016 was recently developed to keep pace with continually evolving construction practices and new technologies. According to a preliminary analysis by the US Department of Energy<sup>ii</sup>, the newly developed commercial model energy code is 7% more efficient than its predecessor (2015 IECC/ASHRAE 90.1-2013), which makes it approximately 30% more efficient than the 2009 IECC/ASHRAE 90.1-2007. As commercial building technology continues to improve, basing minimum requirements on a code that is almost a decade old will put Kentucky, its businesses, and residents at a competitive disadvantage in the marketplace.

### **Compromised Building Performance:**

As just one example, there are safeguards, such as commissioning, in the 2012 IECC that ensure the proper performance of building HVAC systems. Without this critical quality control measure, HVAC systems often operate less effectively and efficiently, resulting in diminished occupant comfort, increased operating costs, and a shorter useful life of equipment. In addition, buildings would be allowed to be built with less insulation which would reduce occupant comfort and make buildings less resilient over the long-term.

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<sup>i</sup> [http://www.pnnl.gov/main/publications/external/technical\\_reports/PNNL-23014.pdf](http://www.pnnl.gov/main/publications/external/technical_reports/PNNL-23014.pdf)

<sup>ii</sup> <https://www.energycodes.gov/development/determinations>