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Minnesota



Center for Energy and Environment



Minneapolis
City of Lakes



Energy



July 31, 2020

Mr. Eric Lipman
Administrative Law Judge
Minnesota Office of Administrative Hearings
600 North Robert Street
St. Paul, MN 55101

**RE: OAH Docket # 8-9001-36776
Possible Amendments to Rules Governing the Minnesota Residential Energy Code**

Dear Judge Lipman:

Thank you for the opportunity to comment on Possible Amendments to Rules Governing the Minnesota Residential Energy Code. The signatory organizations below support amending the existing Minnesota Residential Energy Code¹ to adopt the residential provisions of the 2018 International Energy Conservation Code (IECC).

The comments below outline the obligation of the Minnesota Department of Labor and Industry (DLI) to review the residential energy provisions and detail the policy benefits of adopting them into the 2020 Minnesota Building Code.

Updating the Residential Energy Code in Minnesota Statute

The state's updated 2020 building code went into effect on March 31, 2020 and is based on the 2018 IECC model codes. This update included the adoption of the commercial provisions of the 2018 IECC, however the update did not include the residential energy provisions of the IECC.

Between January and June of 2018, DLI convened a technical advisory group to review the new model codes. Following this process, DLI announced it would delay the decision on the Residential Energy Code until after the United States Department of Energy (DOE) determination was released, stalling the review of the code for potential adoption at that point. On December 10, 2019, DOE issued a determination that the 2018 will improve energy efficiency in residential buildings.²

¹ Minn. R., chapter 1322.

² U.S. Dept. of Energy, No. 2019-12-10, *Final Determination Regarding Energy Efficiency Improvements in the 2018 International Energy Conservation Code (IECC); Notice of determination (2019)*; at <https://www.regulations.gov/document?D=EERE-2018-BT-DET-0014-0007> The DOE determination was issued after the October 2018 date that the technical advisory group report was due.

The Minnesota State Building Code includes the Minnesota Conservation Code for Existing Buildings,³ Minnesota Residential and Commercial Energy Codes,⁴ and the Minnesota Building Code.⁵ State law clearly establishes a process for reviewing and updating the model building codes for use in the state of Minnesota.⁶ It requires that:

*Beginning with the 2018 edition of the model building codes and every six years thereafter, the commissioner shall review the new model building codes and adopt the model codes as amended for use in Minnesota, within two years of the published edition date.*⁷

This process is overseen by DLI, whose general powers are governed by Minnesota law, which mandates that DLI regularly open a review process, in accordance with specific notice and comment procedures, to update the building codes of the State of Minnesota to include the current editions of the model codes used nationally.⁸

With respect to the Residential Energy Code, Minnesota law requires that the DLI “shall act on each new model Residential Energy Code and the new model commercial energy code in accordance with federal law for which DOE has issued an affirmative determination...”⁹ An affirmative determination for the residential provisions of the 2018 IECC was released in December 2019.

Further, Minnesota law obligates DLI to “explore and review the availability and appropriateness of any model energy codes related to the construction of single one- and two-family residential buildings” and to “take steps to adopt the chosen code with all necessary and appropriate amendments.”¹⁰ The administrative provisions for the State Building Code, including rules that specifically address code adoption and amendments, are outlined in Minnesota Rule.¹¹

As described in statute, the State is required to explore and review the latest model code for adoption and use in Minnesota. To date, this review process has not been completed for the Residential Energy Code provisions of the 2018 IECC. We urge the state to amend the existing Minnesota Rules, chapter 1322, to resume the review of the residential provisions of the 2018 IECC as the new statewide energy code.

Policy Benefits of Updating the Residential Energy Code

Minnesota law requires the state to move forward with its exploration and review of the 2018 IECC Residential Energy Code. Analysis of the benefits of the new code supports and demands its adoption. Updating the Residential Energy Code is essential to maintaining reasonable safeguards for health, safety, welfare, comfort and security for Minnesota residents.

Analysis from the Pacific Northwest National Laboratory (PNNL) demonstrates the cost effectiveness of updating Minnesota’s current energy code, an amended version of the 2012 IECC, to the unamended 2018 IECC. The study found that updating the energy code would result in over a 6 percent energy savings and a 3.6-year payback. Results from the analysis are summarized in the table below.

³ Minn. R., chapter 1311.

⁴ Minn. R., chapter 1322 and 1323.

⁵ Minn. R., chapter 1305.

⁶ See Minn. Stat. § 326B.106 subdivision 1(c).

⁷ *Id.*

⁸ Minn. Stat. § 326B.106.

⁹ See Minn. Stat. § 326B.106 subdivision 1(d).

¹⁰ Minn. Stat. § 326B.118.

¹¹ Minn. R., chapter 1300 (State Building Code administrative provisions) and Minn. R., part 1300.0080 (rules governing code adoption and amendments).

Climate Zone	Increase in Costs	Annual Savings	Simple Payback (years)	Payback Over Life*
6	\$556	\$146	3.81	15.76
7	\$449	\$169	2.66	22.58
Ave.	\$543	\$151	3.60	16.69

*Based on a 60-year asset

As shown in the PNNL analysis, energy efficiency improvements associated with updating the Residential Energy Code outweigh any incremental increase in building costs. The analysis also found that on average, new homeowners would save \$151 annually on their energy bills compared to those occupying homes built to Minnesota’s current code. It is important to note that the energy code is the only building code that has expectations for cost effectiveness, despite being the only code that pays back homeowners and occupants through energy savings and associated utility bill reductions.

The energy savings that would result from the adoption of the 2018 IECC are significant, particularly for low-income families who often have a disproportionately high energy burden. Reduced energy use stemming from greater energy efficiency improvements also increases long term housing affordability. Homes constructed today are likely to still be occupied 50-100 years from now, meaning the savings and benefits from updating to the unamended 2018 IECC will continue to payback homeowners over the lifetime of the building.

In addition to the significant cost savings benefits noted above, adoption of the unamended 2018 IECC would improve building performance, resulting in healthier and more durable and resilient homes. Studies have shown that improving energy efficiency enables homes to be better prepared to deal with extreme weather events.¹² In addition, reduced energy use lowers the demand on the grid, allowing for more flexibility and reliability during extreme weather.

The adoption of the residential provisions of the 2018 IECC is also essential for the state to meet its established energy and climate goals. Minnesota’s 2016 Climate Solutions and Economic Opportunities report identified the implementation of strong energy codes as necessary to meeting the state’s emissions reduction goals. Since 2009, Residential Energy Codes alone have saved Minnesota over 13 million MMBtu in energy (equivalent to the annual energy use of over 100,000 homes) and over 950,000 metric tons of CO₂.

Due to Minnesota’s six-year building code adoption cycle, the state is not required to review and update the energy code until 2026. If the code is not updated now, Minnesota homeowners will be buying homes constructed to a nearly 14-year-old standard by the time of the next code update. Our Midwestern neighbors of Ohio, Indiana, Illinois, and Nebraska have all already adopted the 2018 IECC residential energy provisions. Iowa is currently reviewing the 2018 IECC for adoption. Minnesota needs to move forward with adopting these requirements to ensure the state does not fall further behind.

Conclusion

The adoption of the residential provisions of the 2018 IECC is one of the most cost effective ways to effectively increase the level of efficiency of buildings, provide the state a way to meet established climate goals, and maintain reasonable safeguards for health, safety, welfare, comfort and security for Minnesotans. Failure to update now would set the state Residential Energy Code back over a decade, putting Minnesota well behind other states in the Midwest before the next update in 2026.

¹² See: *BUILDING ENERGY CODES: Creating Safe, Resilient, and Energy-Efficient Homes*, https://www.imt.org/wp-content/uploads/2018/02/non-energy_benefits_of_energy_codes_report.pdf

By law, Minnesota must move forward with the review process. Not doing so would contradict statute and result in a missed opportunity to improve the housing stock for current and future residents in the state. If you have any questions about these comments, please contact Nicole Westfall, Senior Building Policy Associate, Midwest Energy Efficiency Alliance, at nwestfall@mwalliance.org.

Sincerely,

American Institute of Architects Minnesota

Center for Energy and the Environment

Clean Energy Economy Minnesota

City of Minneapolis, Sustainability Division

City of St. Paul

Fresh Energy

Legal Services Advocacy Project

The Energy Conservatory

Midwest Energy Efficiency Alliance

c.c.: Ms. Nancy J. Leppink, Commissioner, Minnesota Department of Labor and Industry