



April 13, 2020

Minnesota Board of Electricity
c/o Minnesota Department of Labor and Industry
443 Lafayette Road N.
St. Paul, MN 55155

VIA ELECTRONIC DELIVERY

To the Minnesota Board of Electricity:

This letter contains the official comments of Housing First Minnesota to Minnesota Rules Chapter 1315 of the Minnesota Electrical Code (Proposal). By way of background, Housing First Minnesota represents more than 1,100 member companies statewide. Our diverse membership, which produces homes throughout Minnesota, is engaged in all aspects of housing, including land development, new home construction, multi-family construction and home remodeling.

Our comments on the Proposal reflect Housing First Minnesota's core principle that all housing policies should strike the balance of safety, durability and affordability. This vision is not unique to Housing First Minnesota. It is also the policy of the state of Minnesota. The enabling statutory language for Minnesota's building codes says the these codes are intended to "provide basic and uniform performance standards, establish reasonable safeguards for health, safety, welfare, comfort, and security of the residents of this state and provide for the use of modern materials, devices, materials, and techniques which **will in part tend to lower construction costs**. The construction of buildings should be permitted at the least possible cost consistent with recognized standards of health and safety." (Emphasis Added)

BACKGROUND

For the past two years, the Minnesota Department of Labor and Industry has emphasized affordability considerations in its adoption of the latest building codes. The Minnesota Pollution Control Agency, in its 2019 update to the Minnesota Construction Stormwater Permit, also emphasized affordability, with the only cost increase coming as a result of a change in Federal policy. The Minnesota Board of Plumbing, in its ongoing review of the Minnesota Plumbing Code, goes further yet as it considers amending out wasteful requirements from its previous iteration.

Against these recent and ongoing rulemaking initiatives by the State of Minnesota, the Proposal stands in stark contrast, both in approach and published content. Residential electrical costs will likely increase by at least 10 percent if the Proposal is adopted without amendment.



During a September 2019 tour of a housing project by the Senate Select Committee on Home Ownership and Availability, members of the State Senate and the housing industry spoke at length about the various costly housing policies that collectively have contributed to an erosion of housing affordability in Minnesota. Electrical Code requirements, including arc fault protection adopted in 2017, were among the three dozen policies that had a combined impact of up to \$100,000 for new, single-family homes.

Housing First Minnesota has concerns in two broad areas; technical issues with the language and provisions of the Proposal, and the process used in adoption both nationally and in Minnesota.

Housing First Minnesota formally requests a hearing on the adoption of the Proposal.

Technical Policy Considerations & Recommendations

Housing First Minnesota has identified nine (9) areas of concerns with the existing Minnesota Electrical Code and the Proposal that adopts the 2020 National Electrical Code. For clarity, all references refer to the 2020 National Electric Code, which would be adopted under the Proposal.

1. **210.8(A): GFCI. 250-Volt GFCI Provision.** In residential construction, only a single appliance is serviced by a single 250-volt connection. These appliances are stationary, and the risk of water is virtually non-existent.

Recommendation: Amend Minnesota Rules 1315 to exclude 210.8(A) on 250-Volt receptacles.

2. **210.8(A)(5): GFCI Protection, Basements.** As written, the change to 210.8(A)(5) would require GFCI receptacles in basements, finished or unfinished. Our members

Recommendation: Amend Minnesota Rules 1315 to retain the language of the 2017 National Electric Code.

3. **210.12(A) Arc-Fault Circuit-Interrupter Protection, Dwelling Units.** The requirement for AFCIs is most applicable to newly built homes, yet electrical distribution fires occur most in dwellings more than 40 years old. Housing First Minnesota's members report there has been a sharp increase in consumers reports of "nuisance tripping" in the past two years. This provision has been the source of a large number of complaints from new-home owners and a substantial source of customer call-backs and questions.

Recommendation, revise this section as follows:

(A) Means of Protection: Dwelling Units. All 120-volt, single-phase, 15- and 20-ampere branch circuits supplying outlets or devices installed in dwelling unit

kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry areas, or similar rooms or areas shall be protected by any of the means described in 210.12(A)(1) through (6):

(A)(1) – (C) unchanged.

(D) Branch Circuit Extensions or Modifications — ~~Dwelling Units and Dormitory Units~~. In any of the areas specified in 210.12(A) ~~or~~ (B), where branch-circuit wiring is modified, replaced, or extended, the branch circuit shall be protected by one of the following:

Rest of section remains unchanged.

4. 210:52 (C) (2) Island and Peninsular Countertops and Work Surfaces.

While this new requirement may seem relatively minor, Housing First Minnesota’s members noted that this change, along with the inclusion of the change to 314.27(C) (Boxes At Ceiling Suspended, Paddle Fans) will cause increased costs to engineering, design and labor to ensure that these two changes are met simultaneously while maintaining the designs the market demands.

Recommendation: Amend Minnesota Rules 1315 to retain the 2017 National Electrical Code language.

- 5. 230.67: Surge Protection Devices.** Our State Building Codes are meant to protect the health and safety of occupants and durability of the structure. 230.67 is about maintaining the appliances, in the rare event that an electrical surge causes damage. These devices can be overly sensitive, and the activation of surge protection can produce a complete loss of power during winter months – shutting down furnaces. During an especially cold winter, homebuyers could see massive damage from burst pipes. This section is in conflict with the intent of the code and should be removed.

Recommendation: Amend Minnesota Rules 1315 to retain this as instruction to installation when a homeowner chooses to install this device.

- 6. 230.85: Exterior Disconnect, Dwellings.** As noted above, with Minnesota’s cold climate, any potential loss in power to the dwelling in winter months can cause costly damage to a dwelling. For dwellings relying on sump pumps, the complete loss of power can lead to water in the basement. Exterior disconnect devices have the potential for misuse and vandalism. As with 230.67, the negative outcomes to the homeowner far outweigh the benefit as the vast majority of the devices required under 230.85 will never be used.

Recommendation: Amend Minnesota Rules 1315 to retain 2017 NEC language which

required this only when a photovoltaic system is present.

7. **314.27(C) Boxes at Ceiling Suspended, Paddle Fans.** Throughout the various building codes adopted by our State, Minnesota follows the practice of use at time of permitting. Changing requirements for possible future uses only adds cost to the home and makes the homeowner pay for a situation that will likely never occur. The inclusion of this item runs counter to the legislative intent of the building code.

While the component costs may seem nominal, there are labor costs on the framing and drywall trades that will be impacted by this change, increasing the cost to homes.

Recommendation: Amend Minnesota Rules 1315 to not adopt 314.27(C) for dwellings unless a paddle fan is being installed at the time of permitting.

8. **406.4(D)(4) Arc-Fault Circuit-Interrupter Protection Replacement.**

As Housing First Minnesota has recommended amending 210.12(A) to exclude Arc Fault-Interrupter Protection in new homes, this provision has been modified for consistency.

Recommendation: Amend Minnesota Rules as follows:

406.4(D)(4) Arc-Fault Circuit-Interrupter Protection. Where a receptacle outlet is located in any areas specified in 210.12(A) or (B), a replacement receptacle at this outlet shall be one of the following:

Rest of section remains unchanged.

9. **406.9. (C) Receptacle Limitations in Bathrooms.**

Members report that homeowners want an easily accessible receptacle in their bathrooms and the National Electric Code has long recognized this fact

Recommendation: Amend Minnesota Rules 1315 to retain the 2017 National Electric Code requirements.

Housing First Minnesota recognizes that the adoption of Minnesota amendments to the National Electric Code by the Board is unprecedented. The adoption of these amendments would prevent Housing First Minnesota from seeking a legislative remedy to our concerns. Both the Senate Select Committee on Home Ownership and Availability and the Legislative Commission on Housing Affordability have shown interest in reducing, not adding to, the cost of housing in our state.

Process Considerations – Nationally

Over the past decade, the model codes prepared by various entities have regrettably become sales channels for product manufacturers. The practice of “regulatory marketing” increases the

cost of construction through the inclusion of specific products in the model codes. For the companies manufacturing these now-mandated products, this practice is a financial win. For the consumer, it all too often results in unnecessarily higher home prices. The sales figures for the product manufacturers grow at the expense of housing affordability.

This is an area of deep concern for Housing First Minnesota across all model codes, not uniquely the electrical code. From insulation manufacturers who lobby to increase insulation requirements in the International Energy Conservation Code, to the dishwasher air gap device in the Plumbing Code, the practice of regulatory marketing is all too common. While this may occur at the national level, state regulators can rectify this unseemly practice and must make a concerted effort to do so.

Process Considerations - Minnesota

Upon the release of the Proposal, many Housing First Minnesota members raised concerns about the process, which adopts the National Electric Code recommendations with no Minnesota amendments.

Our concerns are rooted in the fact that, while most rulemaking bodies housed under the Department of Labor and Industry amend and produce the various model codes on which our industry relies, the Board of Electricity does not. The practice of adopting the model codes, without rigorous review and amendments, rewards entities that engage in regulatory marketing, while unnecessarily raising costs for Minnesota consumers.

Further, the adoption of the Proposal without amendments underscores the need for legislative oversight of housing policies. In recent Legislative sessions, the Minnesota Legislature has considered oversight of new housing policies when the cost to homeowners is \$1,000 or greater. Industry practitioners estimate that the cost of the Proposal is \$2,000 per new home. This Proposal would certainly enhance the oversight considerations being debated by the Legislature.

CONCLUSION

The combination of amendments proposed by Housing First Minnesota would save buyers of new homes up to \$2,000. This relief comes at a time when Minnesota has the highest new housing costs in the Midwest and critically low inventory available for sale. Policy makers at all levels are examining ways to decrease, not increase the cost of housing. Additionally, the suggested amendments address several existing provisions which have caused practical challenges for homeowners, and warranty callbacks for builders, electricians and appliance installers.

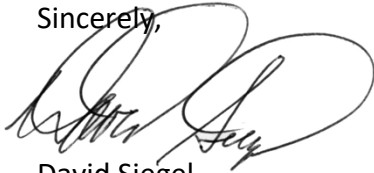
The State of Minnesota has in recent code cycles successfully navigated an effective balance between safety and affordability. Unfortunately, the Proposal departs from this and threatens to establish a worrisome precedent. We urge the Board of Electricity to reconvene with a stated

objective of better balancing safety and affordability, and examining the items we have highlighted herein.

If you have any comments on the considerations and recommendations of Housing First Minnesota, please contact Nicholas Erickson, Housing First Minnesota's Director of Research and Regulatory Affairs. He can be reached at nick@housingfirstmn.org.

Thank you for the consideration of our comments.

Sincerely,

A handwritten signature in black ink, appearing to read "David Siegel". The signature is fluid and cursive, with the first name "David" and last name "Siegel" clearly distinguishable.

David Siegel
Executive Director
Housing First Minnesota

CC:

Legislative Commission on Housing Affordability
Senate Select Committee on Home Ownership Affordability and Availability