Minnesota Board of Electricity

STATEMENT OF NEED AND REASONABLENESS

Proposed Amendment to Rules Governing the Minnesota Electrical Code, Minnesota Rules, chapter 1315, Revisor's ID number R-4205.

INTRODUCTION

The Board of Electricity ("Board") proposes to adopt amendments to Minnesota Rules, chapter 1315 of the Minnesota State Building Code ("Building Code"), which contains the Minnesota Electrical Code. The Building Code includes the adoption of current model codes and amendments to these model codes, including the National Electrical Code (NEC). Minn. R. 1300.0050(J).

The amendments adopt by reference the 2014 edition of the NEC. Specifically, the Board proposes to adopt the NEC as approved by the American National Standards Institute (ANSI), which was developed and published by the National Fire Protection Association, Inc. (NFPA).[1] Historically, the NEC has been adopted into the Building Code without amendment. This is the case with the 2014 edition of the model code and the proposed rule.

Minnesota Statutes, sections 326B.31 to 326B.399 are known as the Minnesota Electrical Act ("Electrical Act").[2] The safety standards of the Electrical Act, Minnesota Statutes, section 326B.35, stipulate that the most recent published edition of "the National Electrical Code as adopted by the National Fire Protection Association, Inc. and approved by the American National Standards Institute, and the National Electrical Safety Code as published by the Institute of Electrical and Electronics Engineers, Inc. and approved by the American National Standards Institute, shall be prima facie evidence of accepted standards of construction for safety to life and property…."

The 2014 edition of the NEC was developed by the National Electrical Code Committee of the NFPA. Detailed information on the changes made to the NEC is available online in several documents. The following documents and reports contain all of the proposed changes to the NEC and the initial report by the National Electrical Code Committee on the proposed changes:

2013 Annual Revision Cycle: National Electrical Code Committee Report on Proposals	http://www.nfpa.org/Assets/files/AboutTheCodes/70/70-A2013-ROP.pdf
Draft of Proposed NFPA 70®: 2014 Edition National Electrical Code	http://www.nfpa.org/Assets/files/AboutTheCodes/70/70-A2013-ROPDraft.pdf
Errata NFPA 70® National Electrical Code® (Report on Proposals); Proposed 2014 Edition	http://www.nfpa.org/Assets/files/AboutTheCodes/70/70-A2013-ROPErrata.pdf

1 (ANSI/NFPA 70-2014), copyrighted by the NFPA, One Batterymarch Park, Quincy, Massachusetts 02169-7471.
2 Minn. Stat. § 326B.399.

The 2013 Annual Revision Cycle: National Electrical Code Committee Report on Proposals was published in 2012 and the public was given an opportunity to comment by October 17, 2012. After considering public comment, the National Electrical Code Committee published the following report on comments, including any modifications made by the committee after publication of the 2012 reports on proposals:

2013 Annual Revision Cycle; National Electrical Code® Committee Report on Comments	http://www.nfpa.org/Assets/files/AboutTheCodes/70/70-A2013-ROC.pdf
Errata NFPA 70® National Electrical Code® (Report on Comments); Proposed 2014 Edition	http://www.nfpa.org/Assets/files/AboutTheCodes/70/70-A2013-ROCErrata_14-1.pdf
Errata NFPA 70® National Electrical Code® (Report on Comments); Proposed 2014 Edition	http://www.nfpa.org/Assets/files/AboutTheCodes/70/70-A2013-ROCErrata_2-82_2-84_16-37_17-37.pdf

NFPA acted on the 2014 NEC at its Association Technical Meeting held June 2013 in Chicago, Illinois. The 2014 NEC was issued by the Standards Council on August 15, 2013, with an effective date of August 21, 2013, and supersedes all previous editions. This edition of NFPA 70, a.k.a. National Electrical Code, was approved by ANSI as an American National Standard on August 21, 2013.

The groups most affected by the changes in the NEC are already being trained on the changes in the 2014 NEC. Gary Thaden represents the National Electrical Contractors Association (NECA) in Minnesota. The NECA has labor agreements with local unions of the International Brotherhood of Electrical Workers (IBEW). According to Mr. Thaden, the NECA and the IBEW through their Joint Journeymen and Apprentice Training Committees have held and will continue to hold training sessions on the changes in the 2014 NEC for union electrical contractors, journeymen, and apprentices. The NECA also offers webinars on the 2014 code changes. Judith Rubin is the President of the Minnesota Electrical Association (MEA), which includes almost 700 union and non-union electrical contractors. According to Ms. Rubin, the MEA has held and will continue to hold training sessions on the changes in the 2014 NEC for electrical contractors and licensed electricians.

On behalf of the Board, the Department of Labor and Industry ("Department") began this rulemaking process by publishing a Request for Comments in the *State Register* on Monday, August 12, 2013 (38 SR 222). The Department provides administrative support to the Board, including for rulemaking. No advisory committees were used in this rulemaking.

ALTERNATIVE FORMAT

Upon request, this Statement of Need and Reasonableness can be made available in an alternative format, such as large print, Braille, or cassette tape. To make a request, contact Suzanne Todnem, at the Department of Labor and Industry, Construction Codes and Licensing Division, 443 Lafayette Road North, Saint Paul, MN 55155-4342, or by telephone 651-284-5006, fax 651-284-5725 or email to: dli.rules@state.mn.us. TTY users may call 651-297-4198.

STATUTORY AUTHORITY

The Board's statutory authority to adopt the NEC is set forth in Minnesota Statutes section 326B.32, subdivision 2(a)(3) which provides in part:

> Subd. 2. **Powers; duties; administrative support.** (a) The board shall have the power to:
>
> (1) elect its chair, vice-chair, and secretary;
>
> (2) adopt bylaws that specify the duties of its officers, the meeting dates of the board, and containing other provisions as may be useful and necessary for the efficient conduct of the business of the board;
>
> (3) adopt the Minnesota Electrical Code, which must be the most current edition of the National Electrical Code and any amendments thereto. The board shall adopt the most current edition of the National Electrical Code and any amendments thereto pursuant to chapter 14 and as provided in subdivision 6, paragraphs (b) and (c);

Because the Minnesota Electrical Code is part of the Building Code, Minnesota Statutes section 326B.101 applies:

> 326B.101 **POLICY AND PURPOSE.** The State Building Code governs the construction, reconstruction, alteration, repair, and use of buildings and other structures to which the code is applicable. The commissioner shall administer and amend a state code of building construction which will 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 methods, 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.

Minnesota Statutes, section 326B.35, Safety Standards of the Minnesota Electrical Act, also provides for adopting the NEC:

> All electrical wiring, apparatus and equipment for electrical light, heat and power, technology circuits or systems shall comply with the rules of the department and the board and be installed in conformity with accepted standards of construction for safety to life and property. For the purposes of this chapter, the rules and safety standards stated at the time the work is done in the then most current edition of the National Electrical Code as adopted by the National Fire Protection Association, Inc. and approved by the American National Standards Institute, and the National Electrical Safety Code as published by the Institute of Electrical and Electronics Engineers, Inc. and approved by the American National Standards Institute, shall be prima facie evidence of accepted standards of construction for safety to life and property; provided further, that in the event a Minnesota Building Code is formulated pursuant to section 326B.106, containing

> approved methods of electrical construction for safety to life and property, compliance with said methods of electrical construction of said Minnesota Building Code shall also constitute compliance with this section, and provided further, that nothing herein contained shall prohibit any political subdivision from making and enforcing more stringent requirements than set forth herein and such requirements shall be complied with by all licensed electricians working within the jurisdiction of such political subdivisions.

Minnesota Statutes, section 326B.35 supports the proposed rule because it requires adoption by incorporation of the NEC.

This rulemaking is an amendment of existing rules so Minnesota Statutes, section 14.125, does not apply. The proposed rule does not affect farming operations so no copy of the proposed rule was provided to the commissioner of agriculture.[3] The proposed rule does not have its primary effect on Chicano/Latino people so a copy was not submitted to the State Council on Affairs of Chicano/Latino People for review.[4]

Under these statutes, the Board has the necessary statutory authority to adopt the proposed rule.

REGULATORY ANALYSIS

Minnesota Statutes, section 14.131, sets out eight factors for a regulatory analysis that must be included in the SONAR. Paragraphs (1) through (8) below quote these factors and then give the agency's response.

"(1) a description of the classes of persons who probably will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule"

Those who will be affected by the proposed rule, who will bear the costs of the proposed rule, and who will benefit from the proposed rule include: Building owners; equipment suppliers; contractors and code enforcement authorities. Although provisions in the NEC have greater impact on electrical contractors, they also impact technology system contactors and general contractors.

"(2) the probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues"

Because the Board only adopts the NEC and does not administer it, the Board will not incur any costs associated with the adoption of the 2014 NEC. The Department provides administrative support to the Board and administers and enforces rules adopted by the Board.

Costs to the Department include the costs of purchasing code books for state employees who address electrical code questions as well as the cost of revising license examinations to reflect

3 See Minn. Stat. § 14.111.
4 See Minn. Stat. § 3.9223

the updated code. Adoption of an updated version of the NEC will not affect state revenues because the Department currently enforces the existing Minnesota Electrical Code using electrical licensing and permit fees set by statute that go into a dedicated fund to cover administrative and enforcement costs.

"(3) a determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule"

Incorporating a model code by reference is the least costly method for adopting a national model code and is in accordance with statutory requirements. Historically, the state of Minnesota has adopted the NEC by reference without any state amendments. The State is proposing adoption of the 2014 NEC without amendment in this rulemaking, consistent with past code adoptions. This method eliminates the need to purchase separate state amendments with the new code book. The NEC is recognized throughout the United States and many other countries as the prevailing model electrical code.

"(4) a description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule"

No other methods were considered for achieving the purpose of the proposed rule. The NEC is the only electrical code that is generally accepted and in use throughout the United States and the Board is required to adopt the NEC in accordance with Minn. Stat. § 326B.35.

"(5) the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals"

Contractors, inspection departments and designers will need to purchase copies of the 2014 edition of the National Electrical Code. Training curriculum will need to be updated to incorporate any new or changed provisions in the code; however it should be noted that continuing education is a requirement for licensure as an electrician in Minnesota so training is necessary regardless of changes in the code. The changes to this code are made at a national level at national code hearings. The Board and the Department are actively involved in the national amendment process and current with changes occurring to the code.

The additional cost for complying with new requirements identified in the 2014 edition of the NEC vary greatly and are dependent on the type of project. For small projects, there may not be any increase in cost while the costs for large projects could be increased by thousands of dollars. However, any increase on large projects is not significant compared to the overall cost of the project.

"(6) the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals"

If the new edition of the NEC is not adopted, the state of Minnesota would continue to rely on the 2011 NEC. This would cause the industry in Minnesota to use a code that does not incorporate all the latest methods and technologies, which is the purpose of updating the national model codes, and would result in Minnesota falling further behind in electrical standards. Further, Minnesota Statutes, section 326B.35 requires the incorporation of the most recently published edition of the NEC.

"(7) an assessment of any differences between the proposed rule and existing federal regulations and a specific analysis of the need for and reasonableness of each difference"

There are no applicable federal regulations that address electrical code issues in the construction of non-federally owned buildings.

"(8) an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule"

There are no applicable federal regulations that address electrical code issues in the construction of non-federally owned buildings so there is no federal impact on cumulative effect. There are no other state regulations related to the specific purpose of this rule.

PERFORMANCE-BASED RULES

Minnesota Statutes 326B.106 provides authority to adopt a state building code that conforms, insofar as practicable, to national model codes. It also requires that the code be "adopted in terms of desired results instead of the means for achieving those results, avoiding wherever possible the incorporation of specifications of particular methods or materials." The 2014 edition of the NEC implements performance-based standards to the extent practicable.

ADDITIONAL NOTICE

This Additional Notice Plan was reviewed by the Office of Administrative Hearings and approved in a February 10, 2014, letter by Administrative Law Judge Eric. L. Lipman.

Our notice plan includes giving notice(s) required by statute. The Board will mail or email the proposed rule and Dual Notice to everyone who has registered to be on the Department of Labor and Industry's rulemaking mailing lists for electrical rules under Minnesota Statutes, section 14.14, subdivision 1a. The Board will email the proposed rule and Dual Notice to parties who have signed up to receive information about the Board's activities.

In addition to the rulemaking mail and email lists, the Board will be emailing the Dual Notice and proposed rule to trade associations involved in electrical and building construction. Those associations are as follows:

a. Associated Builders and Contractors
b. National Electrical Contractors Association
c. Minnesota Electrical Association

d. Local chapters of the International Brotherhood of Electrical Contractors (IBEW Local 23, 110, 160, 242, 292, 294, 343, 949, and 1999)
e. Local chapter of the Association of Minnesota Building Officials (AMBO)
f. National Association of Elevator Safety Authorities (NAESA)
g. Minnesota Mechanical Contractors Association
h. Association of General Contractors of Minnesota
i. Minnesota Utility Contractors Association
j. Minnesota chapter of the International Association of Electrical Inspectors (IAEI)
k. Contract Electrical Inspector Association (CEIA)
l. Communication, Control, Alarm, Remote, Signaling Association (CCARSA)
m. Minnesota Municipal Utilities Association
n. Minnesota Electronic Security and Technology Association
o. Builders Association of Minnesota (BAM)
p. Builders Association of the Twin Cities
q. Minnesota State Fire Chiefs Association
r. Minnesota Plumbing, Heating and Cooling Contractors Association
s. American Society of Plumbing Engineers – Minnesota Chapter
t. American Society of Civil Engineers – Minnesota Section
u. Association of Minnesota Counties
v. Building Owners and Managers (BOMA)/St. Paul
w. League of Minnesota Cities
x. American Council of Engineering Companies of Minnesota
y. Minnesota Pipe Trades Association
z. Minnesota State Fire Marshal Division
aa. Minnesota Association of Townships
bb. North Central Electrical League
cc. Metropolitan Council

The Board will publish the proposed rules, the Statement of Need and Reasonableness, and Dual Notice on the Board's webpage on the Department of Labor and Industry's website. The Board will also give notice to the Legislature in accordance with Minnesota Statutes, section 14.116. The proposed rules will be published in the *State Register*.

CONSULT WITH MMB ON LOCAL GOVERNMENT IMPACT

As required by Minnesota Statutes, section 14.131, the Board has consulted with the Commissioner of Management and Budget (MMB). The Board did this by sending to the Commissioner of MMB copies of the documents sent to the Governor's Office for review and approval by the Governor's Office prior to the Board's publishing the Dual Notice. Copies were sent on January 23, 2014. The documents included: the Governor's Office Proposed Rule and SONAR Form; draft rules; and almost final SONAR. MMB Executive Budget Officer Elisabeth Hammer responded, in part, as follows in a letter dated February 3, 2014: "Based upon the information provided to me by the Department of Labor and Industry, there does not appear to be significant costs to local units of government that are not recoverable through local fees as a result of the proposed rule."

DETERMINATION ABOUT RULES REQUIRING LOCAL IMPLEMENTATION

Minnesota Statutes, section 14.128 requires the agency to determine whether a local government will have to adopt or amend an ordinance or other regulation to comply with a proposed agency rule and submit this determination for ALJ approval. An agency must make this determination before the close of the hearing record or before the agency submits the record to the administrative law judge if there is no hearing. The statute defines "local government" as "a town, county, or home rule charter or statutory city." As the Board has the rulemaking authority here, the Board has made this determination. No local government will have to adopt or amend an ordinance or other regulation to comply with this proposed rule.

COST OF COMPLYING FOR SMALL BUSINESS OR CITY

Agency Determination of Cost

As required by Minnesota Statutes, section 14.127, the Board has considered whether the cost of complying with the proposed rules in the first year after the rules take effect will exceed $25,000 for any small business or small city. The Board has determined that the cost of complying with the proposed rules in the first year after the rules take effect will not exceed $25,000 for any small business or small city.

Costs to small cities that have adopted a local electrical inspection ordinance include the costs of purchasing code books for city employees who work with electrical code inspections. The 2014 edition of the NEC is available from a wide range of outlets at a cost of $90 and an analysis of changes for $69. City electrical inspectors are required to be licensed and as a condition of license renewal are required to acquire 16 hours of continuing education for every license renewal. The Department participates in the development of an annual inspector training institute that includes 16 hours of code related training at a tuition cost of less than $280, minimizing the training cost associated with adoption of the 2014 edition of the NEC.

LIST OF WITNESSES

If these rules go to a public hearing, the Board anticipates having the following witnesses testify in support of the need for and reasonableness of the rules:

1. Mr. John Schultz, Assistant Director, Construction Codes and Licensing Division, Department of Labor and Industry, will testify about the technical information about the electrical code and the background of the model document.

2. Mr. Anthony Toft, Chair, Minnesota Board of Electricity, will testify about the Board's interest in adopting the 2014 National Electrical Code.

3. Other Department of Labor and Industry staff, if necessary.

RULE-BY-RULE ANALYSIS

1315.0200

Subpart 1. **Title**.

This is a new subpart that officially titles chapter 1315 the "Minnesota Electrical Code."

Subpart 2. **Scope**.

All references to 2011 are replaced with the year 2014. This change is both necessary and reasonable because the NEC is updated and reprinted every three years and because Minnesota Statutes section 326B.35 requires that the most recently published edition of the NEC be used.

The proposed effective date was added to the rule to provide the user information about when to begin using the new model code. The effective date of July 1, 2014, was selected by the Board at the October 8, 2013, Board meeting after consideration of Minnesota Statutes §326B.13, Subdivision 8, which states:

> Subd. 8. **Effective date of rules.** A rule to adopt or amend the State Building Code is effective 180 days after publication of the rule's notice of adoption in the State Register. The rule may provide for a later effective date. The rule may provide for an earlier effective date if the commissioner or board proposing the rule finds that an earlier effective date is necessary to protect public health and safety after considering, among other things, the need for time for training of individuals to comply with and enforce the rule.

The Board determined that an effective date of July 1, 2014, or five days after the Notice of Adoption in the State Register, whichever is later, is the most effective way of protecting public health and safety. The Board considered the following information that was presented at the meeting:

(1) The latest edition of the National Electrical Code has typically been adopted July 1st of the code edition year;
(2) Industry training is developed and scheduled in anticipation of this date;
(3) Gary Thaden, Government Affairs Director for the National Electrical Contractors Association (NECA), stated that there would be confusion in the industry if an effective date other than July 1st of the edition year was chosen, which could have persons installing wiring the wrong way, creating a safety issue; and
(4) Gary Thaden stated that NECA has already started training electricians and contractors on the 2014 edition of the National Electrical Code.

CONCLUSION

Based on the foregoing, the proposed rules are both needed and reasonable.

February 10, 2014
Date

/s/
Anthony C. Toft, Chair
Minnesota Board of Electricity