Minnesota Board of Electricity

STATEMENT OF NEED AND REASONABLENESS

Proposed Amendment to Rules Governing the Minnesota Electrical Code, Minnesota Rules, chapter 1315.

INTRODUCTION

The Board of Electricity ("Board") proposes to adopt amendments to Minnesota Rules, Chapter 1315 of the Minnesota State Building Code, which contains the Minnesota Electrical Code. The amendments adopt by reference the 2008 edition of the National Electrical Code.

Minnesota Statutes, sections 326.241 to 326.248 (2006 & Supp.2007) [to be renumbered 326B.31 to 326B.399 in Minn. Stat. (2008)], are known as the Minnesota Electrical Act ("Electrical Act"). Minnesota Statutes, section 326.243 [326B.35], Safety Standards of the Electrical Act, stipulates that the most recent published edition of the National Electrical Code ("NEC") as adopted by the National Fire Protection Association, Inc. ("NFPA") and approved by the American National Standards Institute ("ANSI"), shall be "prima facie evidence of accepted standards of construction for safety to life and property."

Minnesota Rules 1300.0050 of the Minnesota State Building Code includes the adoption of current model codes and amendments to these model codes. One of these model codes is the 2008 National Electrical Code (ANSI/NFPA 70-2008), copyrighted by the NFPA, One Batterymarch Park, Quincy, Massachusetts 02169-7471.

The 2008 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 two documents: a Report on Proposals and a Report on Comments. The following document is the Report on Proposals to change the NEC. This contains all of the proposed changes to the NEC, and the initial report by the National Electrical Code Committee on the proposed changes: http://www.nfpa.org/assets/files/PDF/ROP/NEC2008ROP.pdf

This Report on Proposals was published, and the public was given an opportunity to comment. After considering public comment, the National Electrical Code Committee published the following Report on Comments, which includes any modifications made by the committee after publication of the Report on Proposals:

http://www.nfpa.org/assets/files/PDF/ROP/70-A2007-ROC.pdf

NFPA acted on the 2008 NEC at NFPA's June Association Technical Meeting held June 3 – 7, 2007 in Boston, MA. The 2008 NEC was issued by the Standards Council on July 26, 2007, with an effective date of August 15, 2007, and supersedes all previous editions. This edition of NFPA 70 was approved as an American National Standard on August 15, 2007.

Historically, the NEC has been adopted into the State Building Code without amendment. That is the case with the 2008 edition of the model code and the proposed rule.

The groups most affected by the changes in the NEC are already being trained on the changes in the 2008 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 2008 NEC for union electrical contractors, journeymen, and apprentices. 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 2008 NEC for electrical contractors and licensed electricians.

The present rulemaking process was begun by the Department of Labor and Industry ("Department") by publishing a Request for Comments in the *State Register* on Monday, July 2, 2007 (32 SR 21). 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 Annette Trnka, at the Department of Labor and Industry, Construction Codes and Licensing Division, 443 Lafayette Road North, Saint Paul, MN 55155-4342, telephone 651-284-5860 and fax 651-284-5743. TTY users may call 651-297-4198.

STATUTORY AUTHORITY

The Board's statutory authority to adopt the National Electrical Code is set forth in Minnesota Statutes section 326.2415 [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 such other provisions as may be useful and necessary for the efficient conduct of the business of the board:
- (3) the Minnesota Electrical Code shall be the most current edition of the National Electrical Code upon its adoption by the board and any amendments thereto as adopted by the board. 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);

The following statutes are also relevant:

16B.59 [326B.101] **POLICY AND PURPOSE.** The State Building Code governs the construction, reconstruction, alteration, and repair of buildings and other structures to which the code is applicable. The commissioner [of the Department of Labor and Industry] 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.

16B.61 [326B.106] GENERAL POWERS OF COMMISSIONER OF LABOR AND INDUSTRY.

Subdivision 1. Adoption of code. Subject to sections 16B.59 to 16B.75 [326B.101 to 326B.194], the commissioner [of the Department of Labor and Industry]shall by rule and in consultation with the Construction Codes Advisory Council establish a code of standards for the construction, reconstruction, alteration, and repair of buildings, governing matters of structural materials, design and construction, fire protection, health, sanitation, and safety, including design and construction standards regarding heat loss control, illumination, and climate control. The code must also include duties and responsibilities for code administration, including procedures for administrative action, penalties, and suspension and revocation of certification. The code must conform insofar as practicable to model building codes generally accepted and in use throughout the United States, including a code for building conservation. In the preparation of the code, consideration must be given to the existing statewide specialty codes presently in use in the state. Model codes with necessary modifications and statewide specialty codes may be adopted by reference. The code must be based on the application of scientific principles, approved tests, and professional judgment. To the extent possible, the code must be adopted in terms of desired results instead of the means of achieving those results, avoiding wherever possible the incorporation of specifications of particular methods or materials. To that end the code must encourage the use of new methods and new materials. Except as otherwise provided in sections 16B.59 to 16B.75 [326B.101 to 326B.194], the commissioner shall administer and enforce the provisions of those sections.

In addition, Minnesota Statutes, section 326.243 [326B.35], Safety Standards of the Minnesota Electrical Act, provides for using the National Electrical Code:

All electrical wiring, apparatus and equipment for electric light, heat and power, technology circuits or systems shall comply with the rules of the department [of Labor and Industry] 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 16B.61 [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.

This rulemaking is an amendment of rules and so Minnesota Statutes, section 14.125, does not apply.

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

REGULATORY ANALYSIS

Minnesota Statutes, section 14.131, sets out seven factors for a regulatory analysis that must be included in the SONAR. Paragraphs (1) through (7) 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 of Electricity only adopts the National Electrical Code and does not administer it, the board will not incur any costs associated with the adoption of the 2008 National Electrical Code.

Costs to the Department of Labor and Industry include the costs of purchasing code books for state employees who deal with electrical code questions as well as the cost of revising license examinations to reflect the updated code. Adoption of an updated version of the National Electrical Code will not affect state revenues.

"(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, in accordance with statutory requirements. Historically, the state of Minnesota has adopted the National Electrical Code by reference without any state amendments. The State is proposing adoption of the 2008 National Electrical Code 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 National Electrical Code 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 National Electrical Code is the only electrical code that is generally accepted and in use throughout the United States, in accordance with statutory requirements.

"(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 2008 edition of the National Electrical Code. Training curriculum will need to be updated to incorporate any new/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 Minnesota State Board of Electricity and the Department of Labor and Industry is actively involved in the national amendment process and the changes that occur in the code.

The additional cost for complying with new requirements identified in the 2008 edition of the National Electrical Code for a typical new home are estimated to be \$150. This additional cost is related to the changes that require all 15 and 20 ampere receptacle outlets to be of the tamperproof type and that all 15 and 20 ampere branch circuits that supply outlets in habitable rooms and areas to be provided with arc-fault circuit interrupter protection.

"(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 National Electrical Code is not adopted, the state of Minnesota would have to fall back on the 2005 edition of the National Electrical Code. This would cause the industry to use a code that does not incorporate all the latest methods and technologies,

which is the purpose of updating the national model codes. Further, Minnesota Statutes, section 326.243 [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.

PERFORMANCE-BASED RULES

Minnesota Statutes 16B.61 [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 2008 edition of the National Electrical Code 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 March 18, 2008, letter by Administrative Law Judge Richard C. Luis.

Our notice plan includes giving notice(s) required by statute. The Board will mail the rules and Dual Notice to everyone who has registered to be on the Department of Labor and Industry's rulemaking mailing list for electrical rules under Minnesota Statutes, section 14.14, subdivision 1a.

In addition to the rulemaking mailing list, the Board will be mailing or e-mailing 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)
- 1. 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 FINANCE ON LOCAL GOVERNMENT IMPACT

As required by Minnesota Statutes, section 14.131, the Department has consulted with the Commissioner of Finance. We did this by sending to the Commissioner of Finance copies of the documents sent to the Governor's Office for review and approval by the Governor's Office prior to the Department publishing the Dual Notice. We sent the copies on February 13, 2008. The documents included: the Governor's Office Proposed Rule and SONAR Form; draft rules; and almost final SONAR. Department of Finance Executive Budget Officer Keith Bogut responded as follows in a letter dated March 12, 2008: "In my opinion, the proposed changes will not impose a significant cost on local governments."

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 deal with electrical code inspection. The 2008 edition of the National Electrical Code is available from a wide range of outlets at a cost of \$75 and an analysis of changes for \$60. 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 of Labor and Industry 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 \$200, minimizing the training cost associated with adoption of the 2008 edition of the National Electrical Code.

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. Annette Trnka, Board, Council and Rulemaking Assistant, Construction Codes and Licensing Division, Department of Labor and Industry, will testify about the rule adoption process and rule adoption documents.
- 3. Mr. James Freichels, Chair, Minnesota Board of Electricity, will testify about the Board's interest in adopting the 2008 National Electrical Code.
- 3. Other Department of Labor and Industry staff, if necessary.

RULE-BY-RULE ANALYSIS

In subpart 1 all references to 2005 are replaced with the year 2008. This change is both necessary and reasonable because the National Electrical Code (NEC) is updated and reprinted every three years and because Minnesota Statutes section 326.243 [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, 2008, was selected by the Board at the December 11, 2007, Board meeting after consideration of Minnesota Statutes § 16B.64, subd. 8 (Supp. 2007), which states:

Subd. 8. **Effective date of rules.** A rule to adopt or amend the state's building code is effective 180 days after the filing of the rule with the secretary of state under section 14.16 or 14.26. The rule may provide for a different effective date if the commissioner or board proposing the rule finds that a different 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, 2008 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 1 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 Contractor's Association (NECA), stated that he felt there would be confusion in the industry if an effective date other than July 1st was chosen, which could have people installing things the wrong way, making it a safety issue; and (4) Gary Thaden also stated that the NECA has started training people for the 2008 edition of the National Electrical Code.

CONCLUSION

Based on the foregoing, the proposed rules are both needed and reasonable.	
Date	James D. Freichels, Chair
	Minnesota Roard of Electricity