which the proposal will alleviate the problem. Good substantiation is the key to gaining acceptance of a proposal. Remember—safe installation is the issue here. It is also a good practice to obtain a copy of the *NEC* Manual of Style when developing Code proposals. This document is available from NFPA at no charge.

Topic 7—Report on Proposals Meeting (ROP)

**Topic 8—Panel Action to Accept** 

**Topic 9—Panel Action to Accept in Principle** 

**Topic 10—Panel Action to Accept in Part** 

Topic 11—Panel Action to Accept in Principle in Part

Topic 12—Panel Action to Reject a Proposal

**Topic 13—Panel Action to Hold a Proposal** 

**Topic 14—Simplified Motion Procedures** 

**Topic 15—Official Ballots for Proposals** 

Topic 16—Report on Proposals Published

**Topic 17—Report on Comments Meeting** 

**Topic 18—Official Ballots for Comments** 

**Topic 19—Report on Comments Published** 

**Topic 20—NFPA Annual Meeting** 

**Topic 21—Appeal to the Standards Council** 

**Topic 22—NFPA Standards Council Issuance** 

**Topic 23—NECA Code Involvement** 

The National Electrical Contractors Association has an Executive Director of Standards and Safety who supervises the work of the *NECA Code and Standards Committee*. The NECA Codes and Standards Committee is made up of volunteers from various NECA Chapters throughout the country.

All NECA Chapters have access to the Codes and Standards Committee through the Executive Director of Standards and Safety where individual Chapter members can solicit assistance in preparing *Code* Proposals or *Code* Comments and submitting them in a timely manner.

NECA's online *Code Question of the Day* has over 6000 subscribers and with links to other organizations, such as the International Brotherhood of Electrical Workers, reaches over 15000 persons with a daily Code Question. Answers to the ques-

tions are published the following day giving subscribers time to dig into their Code Books to try to formulate the correct answer. Comments, both negative and positive, relating to the answers are welcomed. Subscribing is easy. Go to:

#### www.necanet.org

- Click on Codes & Standards
- Click on Subscribe to CQD
- A box appears in the upper left hand corner
- Enter E-mail Address
- Click on Subscribe

Charlie Trout has been a member of NECA's Codes & Standards Committee since 1990 and is an acknowledge expert on electric motors for industrial use. In 2001, he was named chairman of NECA's Technical Subcommittee on Wiring Methods. Charlie is the author of Electrical Installation and Inspection which includes numerous subjects and topics not addressed in any other electrical textbook. In 2006, he was the recipient of NECA's Coggeshall Award, an annual award for a member of the Association who is judged to have made an outstanding contribution to the progress of the industry in the Technical and Training Service field. Charlie has recently served as a consultant for Maron Electric in Skokie, Illinois. Charlie imparts his knowledge to thousands each day as author of NECA's popular online Code Question of the Day.

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## THE ACADEMY OF ELECTRICAL CONTRACTING

Paper Presented by Charlie Trout, Fellow

# THE NATIONAL ELECTRICAL CODE® PROCESS: The Importance of National Electrical Contractor Association Members Participation in the *Code*-Making Process

**June 2008** 

Living by rules is not new. Everything we do is governed by a code of conduct. Without rules governing conduct there would be chaos. Imagine roads without center lines, without stop signs, without speed limits, without cross-walks. Who would make out the best? Probably the big guys, the ones who could force their will upon the weaker or more timid or I must add in here, the less knowledgeable. Equality is achieved by rules of conduct or as electrical contractors like to say "give us an equal playing field". You have probably all felt that indescribable letdown when all your hard work and efforts went South because somebody "value engineered " you out of a project.

As is true in everything else there also are rules to be followed in the installation of electrical work. The National Electrical Code® in its introduction tells us its purpose. The purpose of this Code is the "practical safeguarding of persons and property from hazards arising from the use of electricity". Well now, that's the basic approach each electrical contractor is obligated to take when making any electrical installation.

There is no doubt in my mind that each one of you has at one time or another expressed some concern relating to a *Code* requirement that appeared to you to be either utterly ridiculous, containing no reasoning whatsoever or a requirement that appears to be on the right track but needs some adjustments to bring out its full value as a requirement. Up to now it appears that there is maybe a shrug of the shoulders accompanied by the thought "oh well, maybe the powers that be will fix it, it's not within my power to change it." You couldn't be more mistaken. You can change it, you can fix it or you can eliminate it. It is your *Code* and you have a voice in it!

In a recent article published in Electrical Contractor Magazine "Understanding Design/Build" it was written that in the "next year or so, design build is expected to reach a tipping point where more than 50 percent of all projects (by revenue) will be completed using the design/build delivery method." The article expressed the importance of electrical contractors developing plans for their companies to enhance their design/build capabilities. Several criterions were discussed as being ingredients or knowledge necessary to successfully develop a design/build project. However, no men-

tion was made of what is the single most important consideration that must be developed by the electrical contractor and that is the ability to design in conformance with the requirements of the National Electrical Code®.

The National Electrical Code® is developed through a consensus development process that has been approved by the American National Standards Institute (ANSI). Consensus means participation in the standard development by representatives of all interested parties. The American National Standards process involves:

- Representation that is open to all interested parties
- Public review and comment on proposals for changes
- Study of and response to comments
- Incorporation of accepted changes into a draft standard
- Availability of an appeal process by any participant alleging that the principles of the standards process were not followed during the development process.

The National Electrical Contractors Association (NECA) is an active participant in the development of the National Electrical Code®. This participation is accomplished through the efforts of NECA's "Codes and Standards Committee". The members of this committee are volunteer members from NECA Chapters throughout the country. The names of these volunteer members of NECA's Codes and Standards Committee are recommended and submitted to the National Fire Protection Association (NFPA) through the Standards Council for assignment as members of Code-Making Panels. NECA representatives chair 6 of the 19 Code-Making Panels as well as having a representative on each of the 19 panels. Where a NECA representative chairs a panel, an alternate representative also serves on that panel. Ideally an alternate should sit on every panel to assure NECA participation in the event of some unforeseen circumstance that might prevent the principal member from attending and also to provide additional thoughts during the panel discussions.

No other organization is closer to or more involved in the installation of electrical work than the electrical contractor. The electrical contractor is responsible for the direct supervision of the electrical installation. The electrical contractor bears the prime responsibility of assuring that an electrical installation is done in a manner that assures the "practical safeguarding of persons and property from hazards arising from the use of electricity". Other entities may design electrical installations, others may provide the labor to the electrical contractor for the installation, and other persons may police the installation for safety conformity, but it is the electrical contractor whose direct supervision of every aspect of the installation carries the final responsibility for a safe and adequate installation.

While the consensus process is the required procedure to be followed it does not mean that there are not those who attempt to subvert the process in order to gain favorable requirements for installations in their establishments or use the process to promote sales of their products. The submittal of proposals to introduce new products or I should say to introduce the concepts of new and innovative techniques made possible by the use these products is a great way to expand the purpose of the Code but it should not be used to promote the sales of a particular product while limiting or prohibiting the use of another product. Participation by NECA contractors can help frustrate the attempts of lobbyists to subvert the *Code* to the interests of their employers.

It is of the utmost importance that all contractor members of the National Electrical Contractors Association participate in the code development process. Each contractor member should closely follow the proposal stage and gain valuable insight into the actions taken by the responsible codemaking panel for each proposal. Contractor members should submit comments either affirmatively or negatively during the comment stage on any actions taken on proposals they feel directly effect the safe installation of electrical work.

Contractor participation is not limited to the comment stage. Contractors can and should participate in the proposal stage and submit proposals they feel are necessary to introduce a new requirement or proposals to delete or change an existing requirement. The main thing is not to sit on the sidelines while others make the rules for you to follow. The electrical contractor members are the

ones in charge of the electrical installation and their knowledge, experience, and responsibility for safe installations is necessary to promote the ultimate purpose of the National Electrical Code®.

The following topics explain the National Electrical Code process. The full text with commentary on the National Electrical Code process is shown in a Power Point Presentation which will be available on NECA's website to download and will also be presented at a workshop during the 2008 Chicago Convention. Additionally, the full text can be obtained from the Academy office. A list of topics and a sample commentary is presented below.

**Topic 1—Development of the National Electrical Code® (NEC)** 

Topic 2—Purpose of the NEC

**Topic 3—Type of Code** 

**Topic 4—Technical Committee Membership** 

**Topic 5—Technical Correlating Committee** (TCC)

#### **Topic 6—Starting the Process**

#### • Call for Proposals

Commentary:

Proposals are accepted by the NFPA through the *NEC* staff any time after the deadline of one Code cycle and before the deadline for the following cycle. The *NEC* is revised and updated every 3 years. The deadline for submitting proposals for the 2011 Code is November 07, 2008. At this time the electrical contractor can submit individually proposals for any additions or changes to the NEC that they feel will enhance the purpose of the *Code*.

### Proposals must be submitted in the Proposal Format available from the NEC. Commentary:

A copy of this form is included with the materials presented to you. The proposal form requires information as to which *NEC* section is referenced. The submitter must show what the proposal recommends, that is, new text, revised text, or deleted text. An exact representation of the new or revised text must be shown. Finally a statement of what problem is being addressed with substantiation showing the existence of a problem and the manner in

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