



CODES & STANDARDS COMMITTEE MEETING MINUTES

Monday, February 14, 2011, 8:30 am – 5:00 pm
Tuesday, February 15, 2011, 8:30 am – 11:00 am
Monte Carlo Hotel – Las Vegas, NV

Members Present

Raymond K. Friend, VP District 8, *Chair*
Larry Cogburn, Jacksonville, FL
Stan Folz, Roscoe, IL
Tom Hedges, Ramona, CA
Stan Khan, Aptos, CA
Nathan Philips, Eugene, OR
Doug Pirkle, Atlanta, GA
Steve Poholski, Muskegon, MI
Bruce Shelly, Philadelphia, PA
Mike Smith, St. Louis, MO
Ronnie Toomer, Baton Rouge, LA
Tom Smith, Oklahoma City, OK
Wes Wheeler, Keystone Heights, FL
Scott Cline, Monterey Park, CA
Don Jhonson, South West Ranches, FL
Charlie Trout, Hernando, FL
Rich Sobel, Long Island City, NY
Wayne Brinkmeyer, Houston, TX
Harry Sassaman, Edison, NJ
Marc J. Bernsen, Idaho Chapter NECA
Bobby Gray, Selah, WA
Tom Wood, Loves Park, IL
Jacob Howlett, Canby, OR
Michael J. Johnston, Bethesda, MD,
Secretary

Members Absent

Phil Huff, Mableton, GA
Monte Szendre, Canby, OR
John Luke, Marion, IA
Marty Adams, Pueblo, CO

Others Present

Aidan McCallion, *NECA Staff*
Jerry Rivera, *NECA Staff*
Dan Walter, NECA Vice
President/COO
Mark Earley, NFPA

Day 1 Monday, February 14, 2011

Introduction and Self-Introductions

Chair Friend called the meeting to order at 8:30 am and proceeded with introductions and self introductions of committee members and guests. New member Jacob Howlett (from Wilson Construction) joins the NECA Codes and Standards Committee replacing Monte Szendre. Howlett will be assigned to an *NEC Code-Making Panel* (TBD) and to the NESC on Subcommittee 7.

Chairman's Opening Remarks

Chair Friend welcomed the committee members and gave a brief report of the Executive Committee meeting actions at their recent meeting. Chair Friend thanked the committee members for their support and the work they perform in the development of safety codes and standards. He also emphasized how important the voice of electrical contractors is in this process. Chair Friend briefly discussed NECA 3.0 and that there is now a task force. This concept is being reviewed and presented at regional conventions and district meetings this year. Chair Friend asked for any comments relative to how the CW-CE program is working or not working in their areas. Several committee members provided some positive and negative feedback. Establishing new committee goals and providing a status on the previous goals is necessary for the Executive Committee in June 2011.

National Office Activities

Dan Walter, NECA Vice President and COO, provided the committee with a report on NECA activities national office. Walter indicated that NECA's standing committees were meeting in the first quarter of 2011. Walter indicated that there is overlapping activity and efforts between the NECA's Market Development Committee and the Energy Solutions Task Force. Areas being addressed are work related to energy management opportunities (smart grid efforts) and the opportunities with the production of electric vehicles. Walter mentioned an online energy audit tool being developed for contractors. Walter informed the committee about the ECPAC efforts and that 2010 was one of the best years ever thanks in large part to the leadership of Larry Cogburn. He reminded the committee about the convention coming up in San Diego and that there is a schedule change for the Board of Governors meeting to Friday instead of Saturday. A new Energy Forum is planned for the NECA convention this year.

Secretary's Remarks

Michael Johnston, NECA Executive Director of Standards and Safety provided the committee with an update of current activity of NECA's Standards and Safety group. Secretary Johnston thanked the group for their unselfish support of the *NEC* process and the ongoing work for other safety codes and standards where NECA is represented. Johnston reminded the group about submitting any additional information related to their committee work to the national office for support and guidance as needed.

Guest Speaker – Report from NFPA

Mark Earley, Senior Electrical Engineer at NFPA participated in the meeting and gave a presentation about current NFPA focuses and activities. Earley thanked NECA for their continued contribution to the *NEC* development process and recognized NECA's leadership in the 5 active chair positions and recognized Michael Johnston in his new role as the Chair of the *NEC* Technical Correlating Committee. Earley also introduced the committee to a new *NEC* development process intended to be implemented in the 2017 cycle. Earley also reported that the requirements for electric vehicles are being worked on by a newly assigned *NEC* Task Group. The concern is to propose requirements for individual branch circuits that are for electric vehicle supply equipment (EVSE). Other activity in focus of NFPA is the concern for first responders relative to buildings with solar photovoltaic systems. A special Task Group has been assigned to incorporate requirements in the *NEC* related to LVDC wiring and storage. Earley

concluded his presentation and report while responding to several questions from committee members.

Approval of 2010 Codes and Standards Committee Meeting Minutes

The 2010 NECA Codes and Standards Committee meeting minutes were distributed to the committee members for review, discussion, and approval. Chair Friend asked for a motion and second to approve the previous meeting minutes. The minutes for the meeting of June 8 and 9, 2010 were approved by committee unanimously.

Update on 2009 Established Goals

1. Set a short term goal that is reachable and can be completed within the budget in 2009 (Chair Gueldner)

A short term goal for 2009 is to review and provide input/suggestions for any revisions to the NECA Standing policies. Policies 3 and 9 are mostly related to the NECA Codes and Standards Committee.

Status: **Completed.** This goal was included as an item for the 2011C&S Committee meeting agenda (see below).

2. Set a long term goal for the 2009 committee year (Chair Gueldner)

This goal is for each of the Codes and Standards Committee members to provide feedback to NECA national about major changes proposed for the 2011 NEC so an article or two could be published informing the NECA Chapters and membership of ongoing NEC Committee activities and involvement. Standards and Safety is planning at least 5 NEC-based webinars in 2009. One of these could discuss the work of NECA Codes and Standards Committee representatives and proposed changes coming in the Code.

Status: **Completed.** The development of 2011 NEC-based webinars and presented. Feedback discussed and thoughts gathered for 2014 NEC proposals (ongoing process).

3. Set a 2-3 year goal that can be attainable the future that will benefit the association (Chair Gueldner)

The 2-3 year goal is within the 2011 NEC development cycle includes participation in the development of the 2011 NJATC Significant NEC Changes training material. Since the 2009 NFPA 70E standard is already published plans are to provide training Webinars (about 6) in 2009 that are related to worker safety and electrical contractor safety programs.

Status: **Completed.** Johnston coauthored the NJATC 2011 NEC Significant Changes textbook and PowerPoint. Johnston also assisted multiple JATC instructor training sessions (Train-the-Trainer).

Another important 2-3 year goal is to work on succession planning for NECA CMP members in the 2014 NEC development cycle, possibly proactively developing a Code manpower pool from NECA recommended representatives. The goal objectives would be to encourage new member involvement in this work and ensure that there is

coverage in NECA representation if a Principal member should get sick or otherwise not be able to participate in the standards development process. (Chair Gueldner)

Status: This is work in progress. Due to current economic conditions, appointing alternates on each *NEC* CMP is anticipated to happen only incrementally over the next few Code cycles. The process of appointing replacements and alternates for the 2014 *NEC* cycle is a work in progress and it is anticipated to have our submittal to NFPA by May 1, 2011. The process of appointments for new *NEC* alternates and reassigned principals is currently underway. NECA is still gathering recommended representatives from the District Vice Presidents.

Suggested Goals by Codes and Standards Committee (Ray Friend) 02-14-2011

1. Develop official NECA proposals for the 2014 edition of the *NEC*. These are already being developed and will continue until the deadline on November 4, 2011. It is anticipated that the C&S committee will have a minimum of one Web ex conference call meeting between June and September to continue this process.
2. Continue to work the previous goal (Gueldner 3) on the succession planning for NECA CMP members in the 2014 *NEC* development cycle, possibly proactively developing a Code manpower pool from NECA recommended representatives.
3. NECA Standards and Safety would develop a series of articles in EC magazine that provide a review of significant *NEC* 2011 changes. An additional goal would be to present a few webinars based on the most significant *NEC* changes related to renewable energy and electric vehicle charging systems.
4. Since NFPA 70E-2012 is being published in June, Webinars and NECA convention programs on the NFPA 70E Changes can be a goal that should be achievable.
5. Develop the proposal/request to NFPA to consider a 5-year *NEC* development cycle as voted on and approved by the NECA Board of Governors in 2009. The goal would be to have the proposal developed and submitted to NFPA prior to the Board of Governors meeting in San Diego, CA this year.
6. Develop and provide an *NEC* Code-Panel Representative orientation program for new *NEC* technical committee members in 2011. The new appointed members would travel to Bethesda, MD to attend *NEC* CMP member orientation training.

NECA Technical Committee Representative Reports

NFPA 90A is the standard for the installation of air-conditioning and ventilating systems and 90 B is the standard for the installation of warm air heating and air-conditioning systems. Tom Hedges participated in the ROC meeting for both standards in Quincy, MA. This meeting was to act on comments for both 90A and 90B.

NFPA 99 is the Standard for Health Care Facilities. Don Jhonson provided a detailed look at revisions coming in the next edition of this standard. Significant revisions include removing the word emergency from the standard. The number of receptacles at patient bed locations is increasing as follows: General Care 4 to 8, Critical Care 6 to 14, and

operating rooms require a minimum of 36 receptacles. Wet procedure patient care locations shall be provided with shock protection in the form of an isolated power system or GFCI devices. Selective coordination of overcurrent devices for the entire essential electrical system shall be down to 0.1 second. NECA will need to decide on supporting an effort to submit a Notice of Intent to Make a Motion at the 2011 Annual meeting in Boston, MA. The issue is that the revisions to NFPA 99 that lessen the requirements for selective coordination have been expanded beyond the Critical Branch of the essential electrical system in health care facilities. The change would lessen the requirements for selective coordination for the entire essential electrical system including the life safety branch creating an inconsistency between emergency systems in health care facilities and those for other occupancies.

Tom Smith represents NECA on NFPA 72, NFPA 730, and 731. Smith provided an update on the revision cycle for these standards and some of the specifics related to security systems installations. Smith indicated that NFPA 730 and 731 are gaining industry acceptance and being adopted by more jurisdictions.

Lunch Break 12:00 – 1:00 pm

NECA Technical Committee Representative Reports (continued)

Steve Poholski provided an update of activity related to the NESC revisions. Poholski indicated that the minimum approach distances (MAD) rules in Part 4. Steve explained that the revisions address requirements for use of fire-rated clothing for voltages 50 to 1000 VAC. Table 410-1 is new and provides specific FR clothing requirements based on distances. Calculations are based on IEEE 1584.

NFPA 70E Committee on Electrical safety in Employee Workplaces

Jerry Rivera serves on NFPA 70E as the alternate representative to John Luke who serves as NECA's Principal on the NFPA 70E committee. Rivera provided a high-level review of significant changes to NFPA 70E-2012. Significant changes to the 70E 130 Tables and enhanced rules relating to employee training were discussed. NECA submitted various proposals this development cycle that were directly related to contractor responsibilities as set forth in that standard. Rivera also provided information about a new NECA Safety Professionals Conference being planned for May, 23 and 24, 2011. The concept is to provide a networking venue for safety professionals within NECA, IBEW and NJATC and to allow more concentrated and focused safety-based training programs.

NEC Technical Correlating Committee (TCC) Update

Stan Folz provided an update on current activity and ongoing work for the 2014 NEC. Folz chairs the NEC Usability Task Force and is responsible for updating the NEC Style Manual in this development cycle. Folz also provided an update on the TG work related to addressing the requirements for a lockable disconnecting means Code-Wide in the same manner. Johnston provided an update of new additional NEC task forces that have been formed to address emerging technologies, first responder concerns about solar photovoltaic systems on buildings, and requirements for low-voltage DC wiring, electric vehicle supply equipment.

Update on National Electrical Installation Standards (NEIS) Program

Michael Johnston and Aidan McCallion provided an update on current activity in the NEIS project. McCallion informed the committee of revised standards, new standards in development, and standards projects planned for 2011. Johnston provided some information related to the new NEIS 413 Standard for Installing and Maintaining Electric Vehicle Supply Equipment (EVSE). NECA has developed an EVSE Workshop for contractors based on the *NEC* and the new NEIS 413. Various committee members discussed how the NEIS provide value to the industry and had specific comments about the use at their local levels. Johnston indicated that NECA has teamed with Thomson Reuters (Tech Street) to advance the sales of NEIS to markets beyond those NECA currently reaches. Johnston also indicated that the CEIS project is progressing as planned. The Canadian Electrical Contractors Association (CECA) and the Canadian Standards Association (CSA) have completed several drafts of Canadian Electrical Installation Standards (CEIS).

NECA CMP Chairs in 2014 NEC Cycle

Michael Johnston and Stan Folz indicated that NECA has retained 5 CMP chairs in the 2014 NEC cycle and has gained the Chair of the NEC Technical Correlating Committee. Johnston also announced that in the 2014 NEC cycle, Bobby Gray will chair NEC CMP-18 and Nathan Philips will chair NEC CMP-5. Johnston also discussed committee membership and attrition. In the 2014 *NEC* cycle, many NECA committee representatives will remain in their current committee, while there may be others reassigned to other *NEC* committees as needed. The objectives at this point in time are to provide a technical committee. The following table indicates NECA's committee current representation to the various 2014 *NEC* and other standards technical committees:

CMP/COMMITTEE	REPRESENTATIVE	POSITION
1	Harry Sassaman	Principal
2	Thomas Wood	Principal
3	Stanley Kahn	Principal
4	Ronald Toomer Larry Cogburn	Chair Alternate
5	Nathan Philips Vacant (TBD)	Chair Alternate
6	Scott Cline Vacant (TBD)	Chair Alternate
7	Michael Smith Wesley Wheeler	Chair Alternate
8	Stephen Poholski	Principal
9	Vacant (TBD)	Principal
10	Richard Sobel	Principal
11	Wayne Brinkmeyer Stanley Folz	Principal Alternate
12	Thomas Hedges	Principal
13	Martin Adams	Principal
14	Marc Bernsen	Principal
15	Bruce Shelly	Principal

16	Douglas Pirkle	Principal
17	Don Jhonson Vacant	Chair Alternate
18	Bobby Gray Charlie Trout	Principal Alternate
19	Vacant (TBD)	Principal
AIC-(NFPA 90A)	Tom Hedges	Principal
NFPA 99	Don Jhonson	Principal
EEW-(NFPA 70E)	John Luke	Principal
EEW-AAA	Jerry Rivera	Alternate
NEC-TCC	Stanley Folz	Principal
NEC-TCC	Larry Cogburn	Alternate
PMM-(NFPA 72, 730, 731)	Tom Smith	Principal
ANSI C2 Subcommittee 7 Underground Lines	Jacob Howlett (New)	Principal
ANSI C2 Subcommittee 8 Work Rules	Steve Poholski	Principal

[Committee Meeting (Day 1) recessed at approximately 4:45 pm]

Day 2 Tuesday, February 15, 2011

Standing Policies

Each committee member was provided with a copy of the NECA Standing policies prior to the meeting and asked to review for any suggested updates. Chair Friend asked the committee if any member had any suggested revisions or edits to the current NECA Standing Policies 3, 9, and 19. Note that Policy 3 includes information of concern to the NECA Government Affairs Committee and the NECA Codes and Standards Committee. No revisions or edits were suggested. The committee affirmed the standing policies as is without change in 2011. As an action item, Johnston will relay the action on Standing Policy 3 to Lake Coulson, Secretary of NECA's Government Affairs Committee.

NECA 2014 NEC Proposals

Several committee members submitted *NEC* proposals to review and move forward as official NECA proposals for the 2014 NEC. It was determined that an official NECA proposal would have Johnston's name on it. The committee discussed multiple proposals and agreed to send some forward and hold others that were not fully developed or did not gain consensus of the committee. The members were reminded that guidance to technical committee members for positions to take on critical issues that arise in the *Code* development process. The NECA Codes and Standards Committee can establish positions on proposed changes. The main objective is to establish consistency and act in the best interest of the electrical contractor (installers and maintainers) when voting on the *NEC* proposals and comments. As an action item, NECA Codes and Standards Committee members will continue to submit proposals for

the 2014 NEC cycle and will meet via teleconference to determine if they will be submitted as official NECA proposals. The deadline for submitting proposals is November 4, 2011 at 5:00 pm EST.

Committee Membership Review of Committee Responsibilities

Michael Johnston provided a review of committee member responsibilities. Johnston reviewed the process of submitting NECA recommendations to NFPA Standards Council for approval and appointment to any NFPA technical committee.

NFPA *NEC* 3-year to 5-year Development Proposal

An action item that carries into the 2014 *NEC* development cycle is the acceptance of Ordinary proposal No. 4 at the 2009 NECA Board of Governors meeting. Adopting this proposal, results in developing a NECA (or multiple organization) proposal to the National Fire Protection Association (NFPA) suggesting that the *NEC* 3-year development cycle be change to a 5-year cycle. NJATC and IBEW have also expressed interest in coordination of a group proposal with multiple organizations. Since the 2014 *NEC* development cycle is already scheduled, this proposal would be submitted in 2011 and directed to implementation in the 2017 *NEC* development cycle. Nathan Philips has been designated to lead the discussions and planning for development of a proposal to NFPA requesting consideration of changing the current 3-year development process to a 5-year development process. Philips presented valid reasons in support of the proposal and some considerations that would result from such a proposal. The committee objectives are to develop and submit the proposal by September 2011.

Reasons for proposing a 5-year *NEC* cycle

- Reduce cost and training for staff to keep up with changing code requirements
- Reduce cost of purchasing books
- Informally supported by many industry partners
- Cost to NECA and member participating will be fewer meetings
- Improve code training resources
- Many jurisdictions do not adopt on the 3 year cycle
- More consistent adoption of the most recent edition of the code
- Many safety-related changes are based on hypothetical risks.

Reasons for supporting a 3-year *NEC* cycle

- Frequent changes benefits consumers and users keeps up with technology
- Most NFPA standards are on a 3 year cycle same as other building codes
- Proposes will increase in a 5 year cycle, more work for Committee Members
- 5 year Could keep manufacturers out of market place for 10 years

- Licenses requirements keep up to speed
- TIA wouldn't effectively address changes
- There were suggestions about the idea of developing two three year cycles
- One editorial performed by NFPA staff
- One technical performed by the NEC technical committees
- Ask for policy changes from TCC or Standards Council

There was a discussion about suggesting that the development process for the NEC evolve to real time and be and making it a "living" document.

Action Item: To compile all information into a proposal/request for consideration by NFPA for considering a 5-year NEC development cycle. This proposal could be supported by multiple organizations in addition to NECA, such as, IBEW, IAEI and others. To be submitted by September 2011.

Old Business/New Business

Closing Remarks

Chair Friend and Dan Walter thanked the committee for the continued efforts in the codes and standards work on behalf of NECA. They reminded the committee about the NECA convention in San Diego, CA and our next committee breakfast meeting. The meeting was adjourned on Tuesday, February 15, 2011 at approximately 11:30 am PST.

Submitted by:



Michael J. Johnston,
Executive Director, Standards & Safety
Secretary Codes and Standards Committee