

**NATIONAL ELECTRICAL SAFETY CODE  
SUBCOMMITTEE 1  
COORDINATION  
APPROVED MEETING MINUTES**

**OCTOBER 21, 1998  
IEEE  
PISCATAWAY, NJ**

<u>Name</u>	<u>Organization</u>	<u>10/21</u>
Allen Clapp (Chair and SC5 alt)	SC1, SC5	present
George Horres	SC2	absent
John Dagenhart (Alt)	SC2	present
Gary Engmann	SC3	absent
Jack Christofersen (Alt)	SC3	present
Dave Komassa	SC4	present
Ron martineau (Alt)	SC4	absent
Frank Denbrock	SC5	present
Charlie Bleakley	SC7	present
Bill Koch (Alt)	SC7	absent
Hank Kientz	SC8	present
Jim Tomaseski (Alt)	SC8	present
Don Hooper	Interpretations	present
Chuck Amrhyn	Main	present
 <u>Guests</u>		
Steve Olinick	EEI	present
 <u>IEEE</u>		
Sue Vogel	IEEE	present
Vince Condello	IEEE	present

**Rule 94A (SC2 and SC5)**  
**CP 2383**

**Subcommittee Recommendation:** No action required.

**Vote on Subcommittee Recommendation:**

**Affirmative:**  
**Negative:**  
**Abstention:**

**Explanation of Vote:**

**Rule 94B (SC2 and SC5)**  
**CP 2284**

**Subcommittee Recommendation:** No action required.

**Vote on Subcommittee Recommendation:**

**Affirmative:**  
**Negative:**  
**Abstention:**

**Explanation of Vote:**

**Rule 93A (SC2)**  
**Rule 190, 192 (SC3)**  
**CP 2362**

**Subcommittee Recommendation:** No action required.

**Vote on Subcommittee Recommendation:**

**Affirmative:**  
**Negative:**  
**Abstention:**

**Explanation of Vote:**

**Rule 92E (SC2)**  
**Rule 350F (SC7)**  
**CP 2296**

**Subcommittee Recommendation:** No action required.

**Vote on Subcommittee Recommendation:**

**Affirmative:**

**Negative:**

**Abstention:**

**Explanation of Vote:**

**CP 2213**

**Subcommittee Recommendation:** Accept in principle. A word search will be conducted to ascertain whether the list is correct.

As a result of word search, the following symbols should be added:

F	degrees Fahrenheit
ft <sup>3</sup>	cubic feet
m <sup>3</sup>	cubic meter
kPa	kilopascal
kg	kilogram
mm	millimeter
m <sup>2</sup>	square meter
km <sup>2</sup>	square kilometer

The following symbols should be deleted:

c	centi (10 <sup>-2</sup> )
cm	centimeter
cm <sup>3</sup>	cubic centimeter
g/cm <sup>3</sup>	grams per cubic centimeter
ha	hectare (see attached search info.)
h	hecto (10 <sup>2</sup> )
J	joule
kvar	kilovar
l	liter
lm	lumen
mg	milligram
mV	millivolt
var	var
VA	voltampere

**CP 2213 continued from page 3**

NOTE: See attached search information.

**Vote on Subcommittee Recommendation:**

**Affirmative:** Amrhyn, Bleakley, Christofersen, Clapp, Horres, Denbrock, Hooper, Kientz, Komassa

**Negative:**

**Abstention:**

**Explanation of Vote:**

**Part 1 (SC3)**

**Part 2 (SC4)**

**Part 4 (SC8)**

**CP 2205**

**Subcommittee Recommendation:** Accept. Form Working Group 1.8 to establish a relationship for the recommended safe clearances of Parts 1, 2, and 4 of the NESC. The scope of the WG will be to define a common basis or source for clearances recommended in Part 1, Electric Supply Station (clearances guard to live parts); Part 2, Overhead Lines (electrical components of clearance); and Part 4, Work Rules (minimum approach distance) or to identify the appropriate differences.

Jack Christofersen will recommend a chair and additional members from SC3. The following SC8 members will participate: Fred Doering, Hank Kientz, Larry Schweitzer, David Mitchell, and Jim Tomaseski. Dave Komassa is requested to identify appropriate SC4 members or outside personnel with expertise in this area.

**Vote on Subcommittee Recommendation:**

**Affirmative:** Amrhyn, Bleakley, Christofersen, Clapp, Horres, Denbrock, Hooper, Kientz

**Negative:** Komassa

**Abstention:**

**Explanation of Vote:**

Komassa: SC4 does not see a clear need to change the clearance values in Part 2.

**Rule 231A (SC4)**  
**Rule 420Q (SC8)**  
**CP 2191**

**Subcommittee Recommendation:** No action required.

**Vote on Subcommittee Recommendation:**

**Affirmative:**  
**Negative:**  
**Abstention:**

**Explanation of Vote:**

**Rule 96C, 97 (SC2)**  
**Rule 215 B1, B2, B3, B4 (SC4)**  
**CP 2182**

**Subcommittee Recommendation:** No action required.

**Vote on Subcommittee Recommendation:**

**Affirmative:**  
**Negative:**  
**Abstention:**

**Explanation of Vote:**

**Part 2 (SC4 & SC5)**  
**CP 2169**

**Subcommittee Recommendation:** No action taken.

**Subcommittee Comment:** No action taken due to failure to achieve a majority vote for any action.

**Vote on Subcommittee Recommendation:**

**Affirmative:**  
**Negative:**  
**Abstention:**

**Explanation of Vote:**

**Section 23 (SC4)**  
**Section 25 and 26 (SC5)**  
**CP 2372**

**Subcommittee Recommendation:** No action required.

**Vote on Subcommittee Recommendation:**

**Affirmative:**  
**Negative:**  
**Abstention:**

**Explanation of Vote:**

**Rule 011**  
**CP 2135**

**Subcommittee Recommendation:** Accept in principle. See CP 2140.

**Subcommittee Comment:** See also IR 498.

**Vote on Subcommittee Recommendation:**

**Affirmative:** Amrhyn, Bleakley, Christofersen, Clapp, Horres, Denbrock, Hooper,  
Kientz, Komassa  
**Negative:**  
**Abstention:**

**Explanation of Vote:**

**Rule 011**  
**CP 2140**

**Subcommittee Recommendation:** Accept as modified.

**011. Scope**

- A. These rules cover supply and communication lines, equipment, and associated work practices employed by a public or private electric supply, communications, railway, or similar utility in the exercise of its function as a utility. They cover similar systems under the control of qualified persons, such as those associated with an industrial complex or utility interactive system.
  
- B. The NESC covers utility facilities and functions up to the service point. For building utilization wiring requirements, see The National Electrical Code® (NEC®), NFPA 70-1993. The NEC covers utilization wiring requirements beyond the service point.
  
- C. NESC rules cover street and area lights (supplied by underground or overhead conductors) under the exclusive control of utilities (including their authorized contractors) or other qualified persons (such as those associated with an industrial complex). Luminaires not under such exclusive control are governed by the requirements of the NEC.
  
- D. NESC rules do not cover installations in mines, ships, railway rolling equipment, aircraft, or automotive equipment, or utilization wiring except as covered in Parts 1 and 3.

Add a definition for service point:

**Service point.** The point of connection between the facilities of the serving utility and the premises wiring.

**Vote on Subcommittee Recommendation:**

**Affirmative:** Amrhyn, Bleakley, Christofersen, Clapp, Horres, Denbrock, Hooper, Kientz, Komassa

**Negative:**

**Abstention:**

**Explanation of Vote:**

**Rule 013A2**  
**CP 2136**

**Subcommittee Recommendation:** Accept as modified.

2. Types of construction and methods of installation other than those specified in the rules may be used experimentally to obtain information, if done where ~~qualified supervision is provided.~~
  - a. qualified supervision is provided
  - b. equivalent safety is provided, and
  - c. on joint use facilities, all affected parties are notified.

**Vote on Subcommittee Recommendation:**

**Affirmative:** Amrhyh, Bleakley, Christofersen, Clapp, Horres, Denbrock, Hooper, Kientz

**Negative:** Komassa

**Abstention:**

**Explanation of Vote:**

Komassa: I am opposed to the addition of b. and c.

**Rule 015G**  
**CP 2312**

**Subcommittee Recommendation:** Accept as modified. Renumber the present 015E to be 015C. Add new rule as proposed to 015D. Renumber the remaining rules.

**015. Intent**

- A. The word "shall" indicates provisions that are mandatory.
- B. The word "should" indicates provisions that are normally and generally practical for the specified conditions. However, where the word "should" is used, it is recognized that, in certain instances, additional local conditions not specified herein may make these provisions impractical. When this occurs, the difference in conditions shall be appropriately recognized and Rule 012 shall be met.
- ~~C~~. Footnotes to a table have the force and effect required or allowed by the rule that specifies the use of the table.
- D. Exceptions to a rule have the same force and effect required or allowed by the rule to which the exception applies.
- ~~E~~. The word "*RECOMMENDATION*" indicates provisions considered desirable, but that are not intended to be mandatory.
- ~~F~~. The word "*NOTE*" or the word "*EXAMPLE*" used in a rule indicates material provided for information or illustrative purposes only. "*NOTES*" and "*EXAMPLES*" are not mandatory and are not considered to be a part of Code requirements.

**CP 2312 continued from page 8**

GF. A "*RECOMMENDATION*," "*EXCEPTION*," or "*NOTE*" applies to all text in that rule above its location that is indented to the same level.

**Vote on Subcommittee Recommendation:**

**Affirmative:** Amrhyn, Bleakley, Christofersen, Clapp, Horres, Denbrock, Hooper, Kientz, Komassa

**Negative:**

**Abstention:**

**Explanation of Vote:**

**Definition, Fiber-optic**

**CP 2216**

**Subcommittee Recommendation:** No action required.

**Vote on Subcommittee Recommendation:**

**Affirmative:**

**Negative:**

**Abstention:**

**Explanation of Vote:**

**Definition, De-energized**

**CP 2217**

**Subcommittee Recommendation:** Accept as modified.

**de-energized.** Disconnected from all sources of electrical supply by opening switches, disconnectors, jumpers, taps, or other means. Synonym: disconnected.

*NOTE:* A de-energized conductor could be electrically charged through various means, such as induction from energized circuits.

**Vote on Subcommittee Recommendation:**

**Affirmative:** Amrhyn, Bleakley, Christofersen, Clapp, Horres, Denbrock, Hooper, Kientz, Komassa

**Negative:**

**CP 2217 continued from page 9.**

**Abstention:**

**Explanation of Vote:**

**Definition, Vault**  
**CP 2313**

**Subcommittee Recommendation:** Accept.

**Vault.** A structurally solid enclosure including all sides, top, and bottom above or below ground ~~with access~~ where entry is limited to personnel qualified to install, maintain, operate, or inspect the equipment or cable enclosed. The enclosure may have openings for ventilation, personnel access, cable entrance, and other openings required for operation of equipment in the vault.

**Vote on Subcommittee Recommendation:**

**Affirmative:** Amrhyn, Bleakley, Christofersen, Clapp, Horres, Denbrock, Hooper, Kientz, Komassa

**Negative:**

**Abstention:**

**Explanation of Vote:**

**Definition, Service drop**  
**CP 2214**

**The CP is withdrawn by the submitter.**

**Definition, Qualified**  
**CP 2162**

**Subcommittee Recommendation:** Accept in part. Accept SC8 recommendation for the definition of “qualified” as modified; delete the word “Note” and make the sentence the second sentence of the definition.

**qualified.** Having been trained in and has demonstrated adequate knowledge of the installation, construction, or operation of lines and equipment apparatus and the hazards involved, including identification of and exposure to electric supply and communication apparatus in or near the workplace. An employee who is undergoing on-the-job training and who, in the course of such training, has demonstrated an ability to perform duties safely at his or her level of training, and who is under the direct supervision of a qualified person, is considered to be a qualified person for the performance of those duties.

**Vote on Subcommittee Recommendation:**

**Affirmative:** Amrhyn, Bleakley, Denbrock, Hooper, Kientz, Komassa, Horres

**Negative:** Clapp, Christofersen

**Abstention:**

**Explanation of Vote:**

Christofersen, Clapp: The original proposal is preferred.

**Definition, Multigrounded vs. Effectively Grounded**  
**CP 2141**

**Subcommittee Recommendation:** Table and request Subcommittee 2 form Working Group 1.9 and provide substitute language for definitions by 1 March 1999. Review also IR 503.

**Vote on Subcommittee Recommendation:**

**Affirmative:** Amrhyn, Bleakley, Christofersen, Clapp, Horres, Denbrock, Hooper, Kientz, Komassa

**Negative:**

**Abstention:**

**Explanation of Vote:**

Horres: This Working Group should be joint with Subcommittee 1.

**Definition, Fiber-reinforced composite structure**  
**CP 2370**

**Subcommittee Recommendation:** Accept as modified by SC5.

**fiber-reinforced composite structure and components.** Fiber-reinforced thermoset or thermoplastic resin structure and structural components.

**Vote on Subcommittee Recommendation:**

**Affirmative:** Amrhyn, Bleakley, Christofersen, Clapp, Horres, Denbrock, Hooper, Kientz, Komassa

**Negative:**

**Abstention:**

**Explanation of Vote:**

**Definition of effectively grounded**  
**IR 503**

**Subcommittee Recommendation:** See CP 2141.

**Vote on Subcommittee Recommendation:**

**Affirmative:**

**Negative:**

**Abstention:**

**Explanation of Vote:**

**Definition of a communication line or communication class conductor**  
**IR 485**

**Subcommittee Recommendation:** No action required. SC4 has sent this to WG 4.8.

**Vote on Subcommittee Recommendation:**

**Affirmative:**

**Negative:**

**Abstention:**

**Explanation of Vote:**

**Definition of service drop and service point**  
**IR 498**

**Subcommittee Recommendation:** No action required. See CP 2140.

**Vote on Subcommittee Recommendation:**

**Affirmative:**  
**Negative:**  
**Abstention:**

**Explanation of Vote:**

**Definition of primary voltage area**  
**IR 493**

**Subcommittee Recommendation:** No action required. See CP 2101 and 2102.

**Vote on Subcommittee Recommendation:**

**Affirmative:**  
**Negative:**  
**Abstention:**

**Explanation of Vote:**

**Basic Impulse Insulation Level (BIL) values for electric distribution structures**  
**IR 508**

**Subcommittee Recommendation:** No action required.

**Vote on Subcommittee Recommendation:**

**Affirmative:**  
**Negative:**  
**Abstention:**

**Explanation of Vote:**