AGENDA

UNIFORM BUILDING CODE COMMISSION
ELECTRICAL ADVISORY COMMITTEE

January 14, 2016 2:00
Room 475
160 E 300 S Salt Lake City, UT

This agenda is subject to change up to 24 hours prior to the meeting.

1. Swear in new members
2. Elect a chair and vice chair
3. Approve minutes from May 29, 2015 meeting
4. Review request from Rocky Mountain Power to discuss the interpretation of NEC Article 90.2(A)(3) and 90.2(B)(5) as they pertain to inter-set devices

Next Scheduled Meeting: as needed

Please call Sharon at 801-530-6163 or email ssmalley@utah.gov if you do not plan on attending this meeting.

In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify Dave Taylor, ADA Coordinator, at least three working days prior to the meeting. Division of Occupational and Professional Licensing, 160 East 300 South, Salt Lake City UT 84115, Phone 530-6628 or toll-free in Utah only 866-275-3675.

UNIFORM BUILDING CODE COMMISSION

ELECTRICAL ADVISORY COMMITTEE
MEETING

May 29, 2015 1:30
Room 475 Heber M Wells Bldg
160 E 300 S Salt Lake City, UT

MINUTES

STAFF
Dan S Jones, Bureau Manager
Sharon Smalley, Board Secretary

ELECTRICAL ADVISORY COMMITTEE MEMBERS
Christopher Jensen
Mike Thomas (excused)
Chris Joyal, Liaison (absent)
David Winger
David Wesemann
Gary Beckstrand
Rhett Butler (absent)

VISITORS

MINUTES

A motion was made by Chris Jensen to approve the minutes from the April 9, 2015 meeting as written. The motion was seconded by David Winger and passed unanimously.

REVIEW ELECTRICAL PORTION OF 2015 IRC

Those present discussed the current electrical amendment to the IRC. Following the discussion on the cost and life safety issues, a motion was made by Chris Jensen to delete the current amendment to 15A-3-206(1) Section E3902.12. The motion was seconded by David Wesemann and passed unanimously.

Following a discussion of the electrical portion of the IRC, a motion was made by Chris Jensen to make a recommendation to adopt Part 8 (Chapters 34-43) of the 2015 IRC with the amendment to Section E3901.9. The motion was seconded by Dave Winger and passed unanimously.

The committee discussed the adoption of the 2014 NEC. Following the discussion, a motion was made by David Wesemann to recommend to the

Commission that adoption of the 2014 NEC go forward with the amendment that was previously recommended separate from the 2015 code. The motion was seconded by David Winger and passed unanimously.

The meeting adjourned at 3:07.

Note: These minutes are not intended to be a verbatim transcript but are intended to record the significant features of the business conducted in this meeting. Discussed items are not necessarily shown in the chronological order they occurred.

Sharon Smalley <ssmalley@utah.gov>

Request for Meeting with Utah EAC

1 message

Sabbah, June <June.Sabbah@pacificorp.com> Mon, Oct 19, 2015 at 2:58 PM
To: "ssmalley@utah.gov" <ssmalley@utah.gov>

Hi Sharon,

This is a request for Rocky Mountain Power to attend the next Utah Electrical Advisory Committee meeting to discuss the interpretation of NEC sections 90.2(A)(3) and 90.2(B)(5) as they pertain to inter-set devices.

Inter-set devices are installed between the customer's meter socket and the company's meter. These devices are intended for whole-house surge suppression, emergency generation connection or solar generation interconnection.

It is the position of Rocky Mountain Power (RMP) that these devices are customer owned and maintained and the installation falls under the jurisdiction of the National Electrical Code (NEC) and the authority having jurisdiction (AHJ) and must be handled in the same manner as all customer devices for electrical code inspections and approval. This view is shared by some of the Building Officials while others maintain that these devices fall under the jurisdiction of Rocky Mountain Power.

We believe that a uniform interpretation needs to be achieved at the state level and be consistent for all Utah jurisdictions.

Please contact me at your earliest convenience to schedule a meeting time.

Sincerely,

June Sabbah

Metering Standards Engineering Manager

801 – 220 - 2114

NFPA 70

National Electrical Code®

2014 Edition

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This 2014 edition includes the following usability features as aids to the user. Changes other than editorial are highlighted with gray shading within sections and with vertical ruling for large blocks of changed or new text and for new tables and changed or new figures. Where one or more complete paragraphs have been deleted, the deletion is indicated by a bullet (•) between the paragraphs that remain. The index now has dictionary-style headers with helpful identifiers at the top of every index page.

ARTICLE 90
Introduction

90.1 Purpose.

(A) Practical Safeguarding. The purpose of this *Code* is the practical safeguarding of persons and property from hazards arising from the use of electricity. This *Code* is not intended as a design specification or an instruction manual for untrained persons.

(B) Adequacy. This *Code* contains provisions that are considered necessary for safety. Compliance therewith and proper maintenance results in an installation that is essentially free from hazard but not necessarily efficient, convenient, or adequate for good service or future expansion of electrical use.

Informational Note: Hazards often occur because of overloading of wiring systems by methods or usage not in conformity with this *Code*. This occurs because initial wiring did not provide for increases in the use of electricity. An initial adequate installation and reasonable provisions for system changes provide for future increases in the use of electricity.

(C) Relation to Other International Standards. The requirements in this *Code* address the fundamental principles of protection for safety contained in Section 131 of International Electrotechnical Commission Standard 60364-1, *Electrical Installations of Buildings*.

Informational Note: IEC 60364-1, Section 131, contains fundamental principles of protection for safety that encompass protection against electric shock, protection against thermal effects, protection against overcurrent, protection against fault currents, and protection against overvoltage. All of these potential hazards are addressed by the requirements in this *Code*.

90.2 Scope.

(A) Covered. This *Code* covers the installation of electrical conductors, equipment, and raceways; signaling and communications conductors, equipment, and raceways; and optical fiber cables and raceways for the following:

(1) Public and private premises, including buildings, structures, mobile homes, recreational vehicles, and floating buildings

(2) Yards, lots, parking lots, carnivals, and industrial substations

(3) Installations of conductors and equipment that connect to the supply of electricity

(4) Installations used by the electric utility, such as office buildings, warehouses, garages, machine shops, and recreational buildings, that are not an integral part of a generating plant, substation, or control center.

(B) Not Covered. This *Code* does not cover the following:

(1) Installations in ships, watercraft other than floating buildings, railway rolling stock, aircraft, or automotive vehicles other than mobile homes and recreational vehicles

Informational Note: Although the scope of this *Code* indicates that the *Code* does not cover installations in ships, portions of this *Code* are incorporated by reference into Title 46, *Code of Federal Regulations*, Parts 110–113.

(2) Installations underground in mines and self-propelled mobile surface mining machinery and its attendant electrical trailing cable

(3) Installations of railways for generation, transformation, transmission, or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communications purposes

(4) Installations of communications equipment under the exclusive control of communications utilities located outdoors or in building spaces used exclusively for such installations

(5) Installations under the exclusive control of an electric utility where such installations

a. Consist of service drops or service laterals, and associated metering, or

b. Are on property owned or leased by the electric utility for the purpose of communications, metering, generation, control, transformation, transmission, or distribution of electric energy, or

c. Are located in legally established easements or rights-of-way, or

d. Are located by other written agreements either designated by or recognized by public service commissions, utility commissions, or other regulatory agencies having jurisdiction for such installations. These written agreements shall be limited to installations for the purpose of communications, metering, generation, control, transformation, transmission, or distribution of electric energy where legally established easements or rights-of-way cannot be obtained. These installations shall be limited to federal lands, Native American reservations through the U.S. Department of the Interior Bureau of Indian Affairs, military bases, lands controlled by port authorities and state agencies and departments, and lands owned by railroads.

Informational Note to (4) and (5): Examples of utilities may include those entities that are typically designated or recognized by governmental law or regulation by public service/utility commissions and that install, operate, and maintain electric supply (such as generation, transmission, or distribution systems) or communications systems (such as telephone, CATV, Internet, satellite, or data services). Utilities may be subject to compliance with codes and standards covering their regulated activities as adopted under governmental law or regulation. Additional information can be found through consultation with the appropriate governmental bodies, such as state regulatory commissions, the Federal Energy Regulatory Commission, and the Federal Communications Commission.

(C) Special Permission. The authority having jurisdiction for enforcing this *Code* may grant exception for the installation of conductors and equipment that are not under the exclusive control of the electric utilities and are used to connect the electric utility supply system to the service conductors of the premises served, provided such installations are outside a building or structure, or terminate inside at a readily accessible location nearest the point of entrance of the service conductors.

90.3 Code Arrangement. This *Code* is divided into the introduction and nine chapters, as shown in Figure 90.3. Chapters 1, 2, 3, and 4 apply generally; Chapters 5, 6, and 7 apply to special occupancies, special equipment, or other special conditions. These latter chapters supplement or modify the general rules. Chapters 1 through 4 apply except as amended by Chapters 5, 6, and 7 for the particular conditions.

Chapter 8 covers communications systems and is not subject to the requirements of Chapters 1 through 7 except where the requirements are specifically referenced in Chapter 8.

Chapter 9 consists of tables that are applicable as referenced.

Informative annexes are not part of the requirements of this *Code* but are included for informational purposes only.

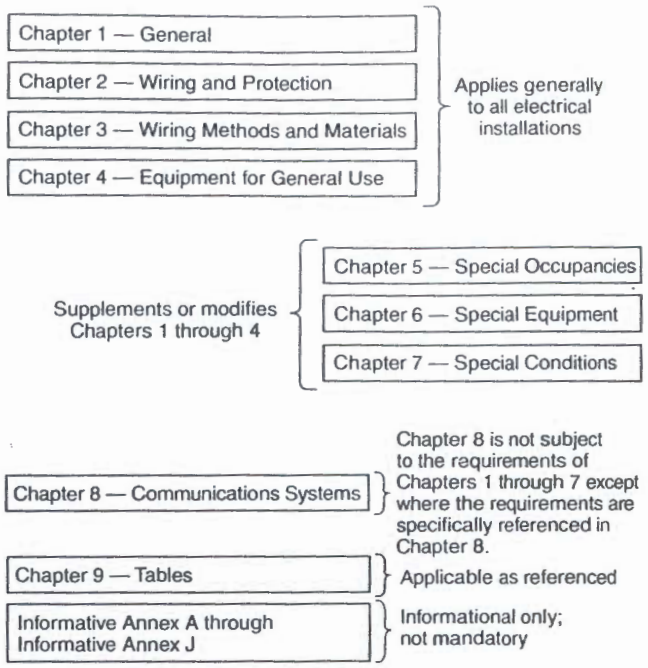


Figure 90.3 Code Arrangement.

90.4 Enforcement. This *Code* is intended to be suitable for mandatory application by governmental bodies that exercise legal jurisdiction over electrical installations, including signaling and communications systems, and for use by insurance inspectors. The authority having jurisdiction for enforcement of the *Code* has the responsibility for making interpretations of the rules, for deciding on the approval of equipment and materials, and for granting the special permission contemplated in a number of the rules.

By special permission, the authority having jurisdiction may waive specific requirements in this *Code* or permit alternative methods where it is assured that equivalent objectives can be achieved by establishing and maintaining effective safety.

This *Code* may require new products, constructions, or materials that may not yet be available at the time the *Code* is adopted. In such event, the authority having jurisdiction may permit the use of the products, constructions, or materials that comply with the most recent previous edition of this *Code* adopted by the jurisdiction.

90.5 Mandatory Rules, Permissive Rules, and Explanatory Material.

(A) Mandatory Rules. Mandatory rules of this *Code* are those that identify actions that are specifically required or prohibited and are characterized by the use of the terms *shall* or *shall not*.

ROCKY MOUNTAIN POWER

Utah Electrical Advisory Committee Meeting
1-14-2016

Purpose

Discuss the application and the inspection process for the installation of inter-set devices and work to implement a state wide policy. The discussion will include the interpretation of NEC sections 90.2(A)(3) and 90.2(B)(5) as they pertain to inter-set devices.

Inter-set devices are installed between the customer's meter socket and the electric utility's revenue meter. The devices are installed for whole-house surge suppression, emergency generation connection or solar generation interconnection. The device is customer owned and maintained.

Installation Discussion

- Should these devices be installed by a licensed electrician? Is a permit required?
- If they are not installed by a licensed electrician, what is required?
- It is the responsibility of the AHJ to make sure the electrical connections are code compliant.
- Should the device be listed unless approved by the AHJ?

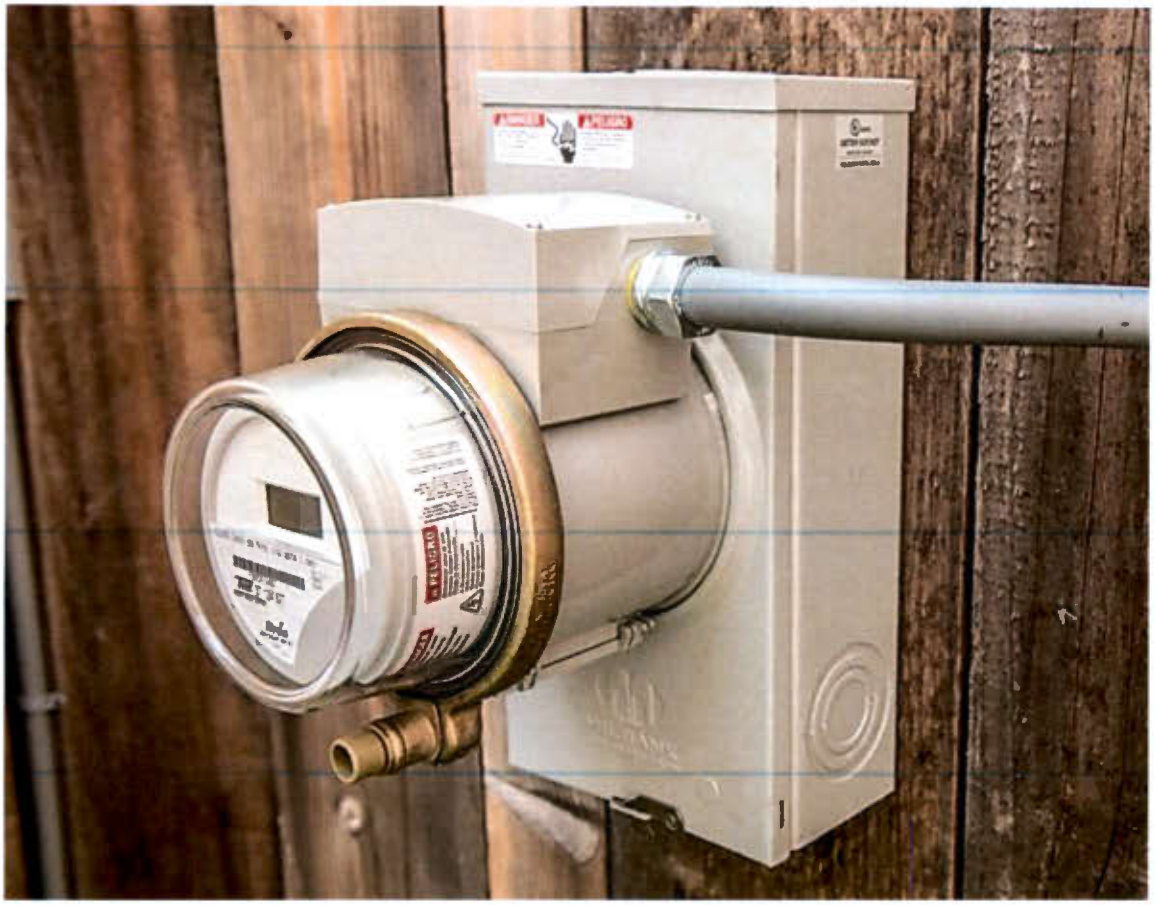
Meter Socket Discussion

- The installation of such a device may require an upgrade to the service or meter socket as required by national, state or local codes or the utilities service requirements. This is usually applicable to older installations where the meter socket is not suitable for the installation of inter-set devices.
- Inter-set devices are not allowed in meter sockets that prevent the removal of the meter without having to remove or dismantle the device.

Examples of Inter-Set Devices

ROCKY MOUNTAIN POWER

Rooftop Solar Application



ROCKY MOUNTAIN POWER

Portable Generator Connection