

Regional Codes Coordinating Committee

OCTOBER 13, 2020

STAFF CONTACT: CAROLYN HORNER

1. Welcome and Introductions.

Please type your name and entity in the chat box for attendance purposes

2. Meeting Summary.

The July 14, 2020 meeting summary will be presented for approval.

Action Items

3. FY2021-FY2023 Work Plan

Discussion and vote on the draft 3-year work plan,
specifically on Appendix B: Work Program Deliverables
Prioritized by RCCC

Completed Training or Action Items: FY18-FY20 Work Plan

Deliverable	Date/Topic
Advisory Boards (5 Boards)	Completed March 2018
ICC Preferred Provider status	Obtained Fall 2019
Codes Adoption Video/webinar	January 2020/July 2020
Annual Survey	Spring every year
Trainings	Energy Code, Swim & Spa Code, Energy & Green Code, Fire Protection Assc. NTX (FPANT), Code Adoption process/updates; COVID-19 Regional Response conf. calls (4)
Electronic Plan Submittal Recommendations	January 2020

Anticipated Training Timeline and Topic Prioritization in New Work Plan

Education/Training Deliverable	Date/Topic
Advisory Boards (4 Boards)	Start Fall 2020/Year 1
Small City Roundtable	Spring 2021
Education Video (Topic discussion needed)	TBD
Trainings	Topics determined by Annual Survey responses and member interests

Regional Codes Work Program Funding

Funding Goal for FY21 = \$100,000

Invoices mailed October 2, 2020

Population (NCTCOG Estimates)	Cost
1 million+	\$7,500
750,000–999,999	\$7,000
500,000–749,999	\$6,000
350,000–499,999	\$5,000
200,000–349,999	\$4,150
100,000–199,999	\$3,250
50,000–99,999	\$2,150
25,000–49,999	\$1,400
10,000–24,999	\$1,000
Less than 10,000	\$500

Regional Codes Work Program Funding

Historic Cost Share Participation

2018 \$28,350

2019 \$24,350

2020 \$27,450 – first year of mailed invoices, sent March 2020

Action Items

4. Approval of the 2020 National Electrical Code Recommended Amendments

Draft Recommendations

The following articles, paragraphs, and sentences of the *2020 National Electrical Code (NEC)* are hereby amended as follows: Standard type is text from the NEC. Highlighted with gray shading is text inserted. Lined through type is deleted text from NEC. A double asterisk (**) at the beginning of an article identifies an amendment carried over from the 2017 edition of the code and a triple asterisk (***) identifies a new or revised amendment with the 2020 code.

*****Article 100; add the following to definitions:***

Engineering Supervision. Supervision by a Qualified State of Texas Licensed Professional Engineer engaged primarily in the design or maintenance of electrical installations.

(REASON FOR CHANGE: To better define the qualifications for engineering supervision. This term is used twenty-four times in the 2017 National Electrical Code.)

Draft Recommendations

****Article 110.2; change the following to read as follows:**

110.2 Approval. The conductors and equipment required or permitted by this Code shall be acceptable only if approved. Approval of equipment may be evident by listing and labeling of equipment by a Nationally Recognized Testing Lab (NRTL) with a certification mark of that laboratory or a qualified third party inspection agency or a field evaluation by a Field Evaluation Body accredited by either the International Code Council International Accreditation Service AC354 or ANSI National Accreditation Board programs and approved by the AHJ.

Exception: Unlisted equipment that is relocated to another location within a jurisdiction or is field modified is subject to the approval by the AHJ. This approval may be by a field evaluation by a NRTL or qualified third-party inspection agency or a field evaluation by a Field Evaluation Body accredited by either the ICC IAS AC354 or ANAB programs and approved by the AHJ

~~Manufacturer's self-certification of any equipment shall not be used as a basis for approval by the AHJ.~~

Informational Note No. 1: See 90.7, Examination of Equipment for Safety, and 110.3, Examination, Identification, Installation, and Use of Equipment. See definitions of *Approved*, *Identified*, *Labeled*, and *Listed*.

Informational Note No. 2: Manufacturer's self-certification of equipment may not necessarily comply with U.S. product safety standards as certified by an NRTL.

Informational Note No. 3: National Fire Protection Association (NFPA) 790 and 791 provide an example of an approved method for qualifying a third-party inspection agency.

(REASON FOR CHANGE: To add clarity and provide more positive options for enforcement and approval of unlisted equipment.)

Draft Recommendations

*****Article 400.8 Field Identification Required: Change the following to read as follows**

408.4 Field Identification Required.

(A) Circuit Directory or Circuit Identification.

Every circuit and circuit modification shall be legibly identified as to its clear, evident, and specific purpose or use. The identification shall include an approved degree of detail that allows each circuit to be distinguished from all others. Spare positions that contain unused overcurrent devices or switches shall be described accordingly. The identification shall be included in a circuit directory that is located on the face or inside of, or in an approved location adjacent *and permanently affixed* the panel door in the case of a panelboard and at each switch or circuit breaker in a switchboard or switchgear. No circuit shall be described in a manner that depends on transient conditions of occupancy.

(REASON FOR CHANGE: To add clarity and provide more positive options for enforcement and approval)

Draft Recommendations

*****Article 410.118: Change the following to read as follows**

410.118 Access to other boxes.

Luminaires recessed in the ceilings, floors, or walls shall not be used to access outlet, pull, or junction boxes or conduit bodies, unless the box or conduit body is an integral part of the listed luminaire.

Exception: removable luminaires with a minimum measurement of 22 in. X 22 in. shall be permitted to be used as access to outlet, pull, junction boxes or conduit bodies.

REASON FOR CHANGE: To add clarity and provide more positive options for enforcement and approval. This will allow access to boxes not integral with the luminaire. This measurement aligns with the limited access above a lay-in ceiling measurement in 110.26(A)(4).

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Draft Recommendations

*****Article 422.31 B: Change the following to read as follows**

422.31 B Appliances Rated over 300 Volt-Amperes

(B) Appliances Rated over 300 Volt-Amperes. For permanently connected appliances rated over 300 volt-amperes, the branch-circuit switch or circuit breaker shall be permitted to serve as the disconnecting means where the switch or circuit breaker is within sight from and is readily accessible to the appliance it serves or is capable of being locked in the open position in accordance with 110.25 and is readily accessible to the appliance it serves.

Informational Note No. 1: For appliances employing unit switches, see 422.34.

Informational Note No 2: The following means of access are considered to constitute readily accessible for this code change when conforming to the additional access requirements of the I Codes:

- (1) A permanent stair.
- (2) A pull-down stair with a minimum 300 lb. (136 kg) capacity.
- (3) An access door from an upper floor level.

REASON FOR CHANGE: To add clarity and provide more positive options for enforcement and approval)

Draft Recommendations

****Article 500.8 (A) (3); change to read as follows:**

500.8 Equipment.

Articles 500 through 504 require equipment construction and installation that ensure safe performance under conditions of proper use and maintenance.

Informational Note No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to installation and maintenance.

Informational Note No. 2: Since there is no consistent relationship between explosion properties and ignition temperature, the two are independent requirements.

Informational Note No. 3: Low ambient conditions require special consideration. Explosion proof or dust-ignition proof equipment may not be suitable for use at temperatures lower than -25°C

(-13°F) unless they are identified for low-temperature service. However, at low ambient temperatures, flammable concentrations of vapors may not exist in a location classified as Class I, Division 1 at normal ambient temperature.

(A) Suitability. Suitability of identified equipment shall be determined by one of the following:

- (1) Equipment listing or labeling;
- (2) Evidence of equipment evaluation from a qualified testing laboratory or inspection agency concerned with product evaluation;
or,
- (3) Evidence acceptable to the authority having jurisdiction such as a manufacturer's self-evaluation or ~~an owner's engineering judgment.~~ an engineering judgment signed and sealed by a qualified Registered licensed Professional Engineer in the State of Texas.

Informational Note: Additional documentation for equipment may include certificates demonstrating compliance with applicable equipment standards, indicating special conditions of use, and other pertinent information.

(REASON FOR CHANGE: Carry over from previous amendment with change to better define the qualifications for an engineering judgment.)

Draft Recommendations

****Article 505.7 (A) changed to read as follows:**

505.7 Special Precaution.

Article 505 requires equipment construction and installation that ensures safe performance under conditions of proper use and maintenance.

Informational Note No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to the installation and maintenance of electrical equipment in hazardous (classified) locations.

Informational Note No. 2: Low ambient conditions require special consideration. Electrical equipment depending on the protection techniques described by 505.8(A) may not be suitable for use at temperatures lower than -20°C (-4°F) unless they are identified for use at lower temperatures. However, at low ambient temperatures, flammable concentrations of vapors may not exist in a location classified Class I, Zones 0, 1, or 2 at normal ambient temperature.

(A) Implementation of Zone Classification System. Classification of areas, engineering and design, selection of equipment and wiring methods, installation, and inspection shall be performed by **a qualified persons**
Registered licensed Professional Engineer in the State of Texas.

(REASON FOR CHANGE: Carry over from previous amendment with change to better define the qualifications for an engineering judgment.)

Draft Recommendations

*****Article 695.6 A 1: Change the following to read as follows**

695.6 (A) Supply Conductors.

(1) Services and On-Site Power Production Facilities.

Service conductors and conductors supplied by on-site power production facilities shall be physically routed outside a building(s) and shall be installed as service-entrance conductors in accordance with 230.6, 230.9, and Parts III and IV of Article 230. Where supply conductors cannot be physically routed outside of buildings, the conductors shall be permitted to be routed through the building(s) where installed in accordance with 230.6(1) or (2).

~~Exception: The supply conductors within the fire pump room shall not be required to meet 230.6 (1) or (2)~~

(REASON FOR CHANGE: To add clarity and provide more positive options for enforcement and approval. All Fire Pump rooms are not Fire Rated as on all 4 sides. There are Fault Currents that could exceed 150,000-190,000 amps and protection of these Service Conductors is essential and conflict with other codes specifically 230.70(A)(1).)

Draft Recommendations

*****Article 71.15 A: Change the following to read as follows**

710.15 General

710.15(A) Supply Output.

Power supply to premises wiring systems fed by stand-alone or isolated microgrid power sources shall be permitted to have less capacity than the calculated load. The capacity of the sum of all sources of the stand-alone supply shall be equal to or greater than the load posed by the largest single utilization equipment connected to the system. Calculated general lighting loads shall not be considered as a single load have adequate capacity to meet the calculated load in accordance with Article 220.

—Informational Note: For general-use loads the system capacity can be calculated using the sum of the capacity of the firm sources, such as generators and ESS inverters. For specialty loads intended to be powered directly from a variable source, the capacity can be calculated using the sum of the variable sources, such as PV or wind inverters, or the combined capacity of both firm and variable sources.

(REASON FOR CHANGE: To add clarity and provide more positive options for enforcement and approval. Unless amended, standby systems would not be required to meet any load demanded by their standby definitions.)

Action Items

5. Approval Sought for Appointment of New Advisory Board Members

The RCCC will consider the nomination of new members to the Advisory Boards.

The overall number of Advisory Board members may change from time to time as approved by the RCCC, as long as at least two-thirds of advisory board members are from the public sector. Members shall be appointed in an effort to satisfy representation from municipalities of varying size and geographic location across the region.

The RCCC shall appoint the chairperson and vice chairperson of each Advisory Board. These persons must be active public or private sector members of the representative Advisory Board and may or may not be members of the RCCC. Priority shall be given to active public sector members over private sector members.

Individuals for consideration are shown on the following slides, grouped by Advisory Board.

Building and Residential Advisory Board

Existing members:

Name	Public Sector Entity	Name	Private Sector Entity
Selso Mata	City of Plano	Mike Mishler	Mishler Builders, Inc.
Brett King	City of Carrollton	Bruce Rachel	Hensley Lamkin Rachel, Inc.
Jim Olk	City of Garland	Jack Baxley	TEXO
Little David Sessions	City of Dallas	Paul Evans	BMC West
Philip Climer	City of Frisco	Jason Simon	Apartment Association of Greater Dallas
Joey Sleeper	City of McKinney	David Lehde	Dallas Builders Association
Christine Hadley	City of Irving		
Sana Tuma	City of Mansfield		
Jeffrey Widmer	City of Rockwall		
Cruz Hernandez	City of Celina		
Mike Sizemore	City of Allen		

Nominees:

Name	Public Sector Entity	Name	Private Sector Entity
Evan Roberts	City of Fort Worth	Aaron Gary	Tempo
Hugh Pender	Farmers Branch	Jarod Fancher	Merriman Anderson Architects
Shahla Layendecker	City of Dallas	Tina L. Duncan	HKS Inc.

Highlight = RCCC members

Energy and Green Advisory Board

Existing Members:

Name	Public Sector Entity	Name	Private Sector Entity
Bob Hart	City of Corinth	Aaron Gary	Tempo Partners
Clint Sparks	City of Irving	Chris Urbanus	Private Sector- Burgess Consultants
Duy Vu	Cedar Hill	Chris Van Rite	MiTek
Eddie Wilson	City of Colleyville	Elias Rodriquez	Construction Concepts Inc
Grace C Darling	Green Arlington Foundation	Gerald J Kettler, PE, CCP	Facility Performance Associates
Jason Vandever	SPEER	Jack Baxley	TEXO - The Construction Association
Joelle Hainley	Town of Flower Mound	Shawn Mullins	Owens Corning
Michael Howard	City of Houston	Shirley Ellis	Energy Systems Laboratory, Texas A&M Engineering Experiment Station
Rick Ripley	City of Arlington	Stan Folsom	Systemhaus
Sana Touma	City of Mansfield	Tom Murrell	QuFresh Inc
Suzanne Arnold	City of Coppell		
Wayne K Snell Jr	City of Irving		

Nominees:

Name	Public Sector Entity	Name	Private Sector Entity
Aijaz Khan	Garland ISD	Dan Lepinski	Dan Lepinski, P.E.
Cody Hughes	City of Fort Worth	Jarod Fancher	Merriman Anderson Architects
		Scott West	Harrison French & Assc. (HFA)

Highlight = RCCC members

Fire Advisory Board

Existing Members:

Name	Public Sector Entity	Name	Private Sector Entity
Bob Morgan	Fort Worth Fire Department	Jack Baxley	TEXO - The Construction Association
David Bull	Ellis County Fire Marshal	Jeffrey Shapiro	International Code Consultants
Dwight Freeman	Dallas Fire-Rescue	Mark Hayes	Wiss, Janney, Elstner Associates
Gabriel A Cabrera	City of Dallas	Randy Hinkle	Hilti
Jason Bolejack	Flower Mound Fire and Emergency Services		
Jeff Ballew	Edgecliff Village		
John Ard	Westlake Fire-EMS Department		
John Holcomb	Forney Fire Department		
Kelly Clements	Southlake Fire Department		
Michael Howard	City of Houston		
Pam McAllister	Duncanville Fire		
Sana Touma	City of Mansfield		
Steve Seddig	Wylie Fire Rescue		
Tanner Dietz	Royse City Fire Department		
Tim Ippolito	City of Lewisville		
Tony Aspden	Plano Fire-Rescue		
Ariana Kistner	City of Rockwall		

Nominees:

Name	Public Sector Entity	Name	Private Sector Entity
David Bull	Ellis County Fire Marshal's Office		
Debra Crafton	Keller Fire-Rescue		
Pat Stewart	City of Granbury		

Highlight = RCCC members

Plumbing and Mechanical Board

Existing Members:

Name	Public Sector Entity	Name	Private Sector Entity
Chuck Sellers	City of Justin	Chris Van Rite	MiTek
Clint Sparks	City of Irving	Elias Rodriquez	Construction Concepts Inc
Douglas P Key	Town of Sunnyvale	Scott Roloff	Dir of Facilities and Landscape
Gail Lux	City of Cedar Hill	Tom	Murrell
Gerry Magnuson	City of McKinney		
Kevin Robinson	Building Official		
Michael Howard	City of Houston		
Paul Coker	City of Mansfield		
Sana Touma	City of Mansfield		

Nominees:

Name	Public Sector Entity	Name	Private Sector Entity
Brady Cudd	Town of Prosper	Eli Kimberly	DynaTen
Jeffrey Green	City of Fort Worth		
Richard Denham	City of Dallas		

Highlight = RCCC members

Action Items

6. Approval Sought for Appointment of Advisory Board Officers

Returning and interested new officers participated in a call with RCCC Officers and COG staff on Sept. 3rd. The following names confirmed their position or interest at that call.

Building and Residential Advisory Board

Officer nominees:

Chair: Selso Mata, Building Official, City of Plano (returning)

Vice Chair: Brett King, Asst. Building Official, City of Carrollton (new)

Energy and Green Advisory Board

Officer nominees:

Chair: Wayne Snell, Director of Inspections, City of Irving (new)

Vice Chair: Stan Folsom, CEO, Systemhaus (new)

Fire Advisory Board

Officer nominees:

- Chair: Bob Morgan, Sr Fire Protection Engineer, City of Ft. Worth (returning)
- Vice Chair: Ariana Kistner, Asst. Chief, City of Rockwall (returning)
- Vice Chair: Steve Seddig, Fire Marshal, City of Wylie (new)

Plumbing and Mechanical Board

Officer nominees:

Chair: Gail Lux, Building Official, City of Cedar Hill (new)

Vice Chair: Kevin Robinson, Building Services Manager, Town of Little Elm (new)

Other Business and Roundtable Discussion

7. Future Agenda Items.

The committee can request future agenda items.

8. Roundtable Topics/Other Business.

RCCC members and NCTCOG will share additional items of interest.

Other Business and Roundtable Discussion

9. Schedule for the Next RCCC Meeting.

The next meeting date is tentatively scheduled for Tuesday, January 19, 2021 at 9:30 AM

Other Items

A list of upcoming events are on our website at
<https://www.nctcog.org/envir/events>

10. Adjournment.

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