



North Central Texas Council of Governments

SUMMARY

Electrical Advisory Board

Thursday, December 5, 2019

9:00A.M.

Tejas B Conference Room, CPIII

600 Six Flags Drive, Arlington, Texas 76011

Chair: James Hathorne, City of Irving

Vice Chair: Jeff McCabe, City of Dallas

1. Welcome and Introductions.

ACTION ITEMS

2. **Electrical Advisory Board FY2020 Appointments.** The FY2020 membership terms begins on October 1, 2019.

Members confirmed as no longer on the EAB, due to retirement, relocation, or ability to attend meetings:

Ismael "Izzy" Rivera, Jr., Bill McGovern, Gary Jones

Members changed from public sector to private sector: Chris Valtierra

New members nominated and voted on for membership on the EAB:

Tracy Moreno, P.E., Principal Engineer, ELS Engineering

Wayne Smith, Chief Building Official, City of Decatur

Roosevelt Fortson, Inspections Services Supervisor, City of Plano

Carl Spangler, Inspection Supervisor, City of Fort Worth

3. **Approval Sought for Appointment of EAB Officers.** Gary Jones served as the Chair with Rick Ripley, City of Arlington, serving as Vice-Chair. NOTE: The Regional Codes Coordinating Council will vote on membership appointments and officers at their January 2020 meeting.

James Hathorne, City of Irving, nominated and voted to the position of Chair of the EAB.

Jeff McCabe, City of Dallas, nominated and voted to the position of Vice-Chair of the EAB.

4. **Review of Current Amendments.** North Central Texas Council of Governments Recommended Amendments to the National Electrical Code.

Members went over the existing 2017 amendments, reviewing 1) what do we carry forward, 2) what do we eliminate, or 3) what do we have new for 2020. The Committee also reviewed the format of the amendments.

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5. **2020 National Electrical Code.** Discussion for reviewing the 2020 National Electrical Code. Members chose to divide into subcommittees based on location. The four locations are as follows:
- Group/Chapters 1&2: meeting in Plano
 - Group/Chapters 3&4: meeting in Fort Worth
 - Group/Chapters 5&6: meeting in Irving
 - Group/Chapters 7&8: meeting in Dallas
- Members will review the 2020 (not the 2017) NEC chapters and bring the results of their subcommittee meetings to the monthly EAB meeting.

INFORMATION ITEMS

OTHER BUSINESS AND ROUNDTABLE DISCUSSION

6. **Future Agenda Items.**
Please see attachments for list of topics brought forward by James Hathorne.
7. **Roundtable Topics/Other Business.** Electrical Advisory Board members and NCTCOG staff may share additional items of interest as time allows.
8. **Schedule for the Next Electrical Advisory Board Meeting.** The next Electrical Advisory Board meeting is TBD.
The EAB voted to have monthly meetings. The next meeting is Tuesday, January 28, 2020, at 9:00 in the Tejas B Conference Room, Centerpoint III, 600 Six Flags Drive

If you plan to attend this public meeting and you have a disability that requires special arrangements at the meeting, please contact Barbara Bradford by phone at (817) 695-9231 or by email at bbradford@nctcog.org 72 hours in advance of the meeting.
Reasonable accommodations will be made to assist your needs.

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1. ROUNDTABLE/OTHER BUSINESS SUCH AS,

- Emergency Disconnects 230.85 /
 - NEMA 3 panelboards-
 - Male Adaptors Used for Entry Of Homeruns & SER Cables
 - Water Protection
 - Sealing Up Male Adapter Penetrations Into The Wall Cavity
 - Service Changes
 - Old Meter Bases with Unfused S E Cables To Panels/Load Centers Within Closets
 - How will each City enforce the 230.85 On Service Changes
 - Upgrades
 - Repair
 - Storm Damage
 -
 - *If Code Making Panel 4 wanted an AHJ to have Exterior Emergency Disconnect(s) for service changes, upgrades, and storm damage they would have included specific language. The same Code Making Panel did, as an example, included such a requirement in NEC section 230.67 Surge Protection. (D) Replacement. Where service equipment is replaced, all of the requirements of this section shall apply.*
 - *The same Code Making Panel 4 had the option, at the same time, to include this type of directive in NEC section 230.85, but has omitted any such wording.*
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- Fire Pumps
 - 695.6 A 1 Exception
 - Service Entrance Conductors Are Allowed Enter A Fire Pump Room Without Complying With 230.6 1 Or 2 if the room is 2-Hr Rated
 - If this application is allowed, what are the issues?
 - Room decks are not rated
 - Service entrance conductors does not comply with entry without overcurrent protection per 230.70 A 1
 - Some locations could enter Fire pump rooms that could be 25' up to 60 or 75' without overcurrent and high to very high Fault Current
 - ❖ Fault Current Downtown Dallas 100,000 up to 190,000
 - ❖ Fault Current Downtown Fort Worth 100,000 up to 190,000 or 200,000
 - ❖ Each entering without protection that would accomplish location and arrangement so as to minimize the possibility of damage by fire from within the premise and from exposing hazards

- ❖ What is the best case scenario to achieve this?
- ❖ 23.06 1 or 2
- ❖ A Fire Pump room could have walls that are Fire Rated but not secure roof deck from collapse
 - ✓ Roof decks in the high percentage of buildings constructed bar joist and pan decking
- ❖ 695.6 A 2 Feeders would require protection from potential damage by fire, structural failure or operational accident
 - ✓ Feeders would not be required to be protected with Fire pump rooms also according Exception to 695.6 A 2 4
 - ✓ This exception and the previous exception does not account for failure before the pump could have opportunity to suppress a fire



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- Jerry Daniel and expedited complaint on problematic contractors
- Qualified Licensed Electricians Onsite
- House Bill 2439
 - Restrictive On Amendments and Code Applications
 - What does this H B Mean
 -
- Solar-Generator-Energy Storage.
 - Problematic Issues with
 - 690
 - ❖ Permanent marking
 - ❖ Layout
 - ❖ Electrode Conductor and Bonding bushings with jumpers 250.64 E
 - ❖ Attic supporting
 - ❖ Disconnect Grouping
 - 710
 - ❖ Stand Alone
 - Permitting
 - Plan Review
 - Inspections
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- Generator Installations
 - Problematic Areas
 - Residential Installations
 - Transfer Switches Installed on Old Service
 - 100 or 125 amp Risers with 200 amp Main Transfer Switches

- ❖ Risers, Meterbases and Service Entrance Conductors Not Increasing to Correspond To The New Rated Transfer Switches
 - ❖ Existing 100 or 125 amp Load Centers Becoming Feed/Sub Panels under 200 Amp Transfer switches
 - 702.4 Capacity
 - ❖ 702.4 B 2
 - ❖ Requesting a Load Calculation To Affirm The Capacity of the Generator
 - Commercial Installation
- Heavy Timber
 - Any concerns
 - N M Cable Use
 - Uses Permitted/ Not Permitted
 - 334.10
 - 334.12
 - Building Types III, IV < V
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- Uses Permitted For Cords 400
 - Varidesk
 - No Outlets Installed For General Use
 - All receptacles are installed on the ceiling for S O Cord
 - Use of a Temporary Construction Distribution Rec
- Wireways And Gutters
 - Gutter Deflections Not According To 314.28
 - Wireways have to comply 314.28
- Smile Direct/ Invisalign
 - Equipment Medical, Area Construction Medical But Not Wired to Comply with 517
- Listing, Labeling And Marked Equipment
 - Problematic Areas
 - Used, Previously Used and Salvaged Equipment
 - IBC reference to Used Equipment
 - Back Lighted Mirrors
 - Hotels
 -
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-
- Qualified Designers, Designs and Engineering
- Supporting of Cables NEC 700 & 800
- What type of relationship does your position have with your Fire Department, Fire Marshall and Fire Inspectors for Mutual Aid on issues



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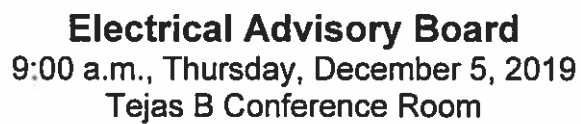
MEMBER SIGN IN SHEET

NAME	SIGNATURE	ORGANIZATION
Paul Abernathy		Electrical Code Academy, Inc.
Kim Allen		TEXO
Jeff Blake		City of Frisco
Doug Boggus	<i>Doug Boggus</i>	City of Grand Prairie
Joe Chandler	<i>Joe Chandler</i>	IEC Dallas Chapter
Robert Chatham		City of Mansfield
James Hathorn	<i>James Hathorn</i>	City of Irving
Gary Jones		IAEI
Jeff McCabe	<i>Jeff McCabe</i>	City of Dallas
Marcus McCloure		City of Garland
Bill McGovern		Electric Solutions Code Services LLC
Randy C. Meadows		City of Farmers Branch
Rodney Patterson		City of Denton
Marcus Ramos	<i>Marcus Ramos</i>	City of McKinney
Rick Ripley		City of Arlington
Mark Sanderlin	<i>Mark Sanderlin</i>	City of Benbrook
David Schaefer		City of Granbury
Wes Shahan	<i>Wes Shahan</i>	IEC Fort Worth/Tarrant County Chapter
Rick Sherer		City of Rockwall
Jay Spraggins		City of McKinney
Matt Squire		City of Richardson
Rex Stewart		ONCOR
Chris Valtierra	<i>Chris Valtierra</i>	City of Fort Worth

Carl Spangler *Carl Spangler* *City of Fort Worth*

Calvin Wayne Smith *Calvin Wayne Smith* *City of Decatur*

Troy Kneegs *Troy Kneegs* *City of Dallas*
Russell Fortson *Russell Fortson* *CITY OF PLANO*

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