

NORTH DAKOTA STATE ELECTRICAL BOARD SPECIAL MEETING MINUTES

Tuesday, November 15, 2016

The North Dakota State Electrical Board meeting was called to order at 1:00 p.m. by President Rodney Mayer at the office of the North Dakota State Electrical Board, 1929 N. Washington Street, Suite A-1, Bismarck, N.D. Members present: Ben Koppelman, Kyle Miller, Tom Paulson and Brad Sylliaasen. Also present: James Schmidt, Executive Director; Doug Grinde, Director of Inspections; Scott Halle, Training and Compliance Administrator, Ashley Windhorst, Administrative Assistant; and Scott Porsborg, Special Assistant Attorney General. Others present: Curt Casper, NECA; Don Iverson, NEMA; and Tim McClintock, NFPA.

Tim McClintock with NFPA presented an overview of changes to the 2017 NEC. Fourteen (14) states are currently working on adopting the 2017 NEC. The changes can also be accessed by visiting NFPA.org/70.

The five (5) new articles covered in the presentation were:

- Article 425 – Fixed Resistance and Electrode Industrial Process Heating Equipment
- Article 691 – Large Scale Photovoltaic (PV) Electric Supply Stations
- Article 706 – Energy Storage Systems (ESS)
- Article 710 – Stand-Alone Systems
- Article 712 – Direct Current Microgrids

Some of the key changes reviewed were:

- Article 90.3 - Code Arrangement – supplements or modifies Chapters 1-7.
- Article 100 - Definition of readily accessible – revised to clarify.
- Article 100 - Definition of structure – revised to add “other than equipment”.
- Article 110.16(B) – Arc Flash Marking of Service Equipment.
- Article 110.21(A)(2) – Reconditioned Equipment.
- Article 110.26(A) – Working Space.
- Article 110.26(A)(4) – Limited Access (new) – includes working space above suspended ceiling and crawl spaces.
- Article 210.8 – Ground-Fault Circuit - Interrupter Protection for Personnel.
- Article 210.8(A)(7) & (B)(5) – Sinks.
- Article 210.8(B) – Other than Dwelling Units – expansion of receptacle configurations requiring GFCI protection in all occupancies other than dwelling units.
 - Discussion on this requirement only being for receptacles. Further discussion on 210.8(E) Crawl Space Lighting Outlets. Crawl space vs. unfinished basement is defined using height.
- Article 210.11(C)(4) – Garage Branch Circuit.
 - Discussion on requiring two (2) circuits in shed vs. garage.

- Article 210.52(G)(1) – Garage Receptacle Outlets.
- Article 210.52(C)(3) – Peninsular Countertop Spaces – measurement is no longer from “connecting edge” but now made from connected perpendicular wall.
- Article 210.52(C)(1) – Countertop and Work Surface.

- Article 210.12(C) & (D) – AFCI Protection.
 - Discussion on AFCI/GFCI requirements and what may happen in the future. Further discussion on AFCI protection for a whole house.
- Article 210.64 – Service Area Receptacle.
- Article 210.71 – Meeting Room Receptacle Outlets.
- Article 220.12 Exception No. 2 – Load Calculation for Office and Bank Occupancies.
- Article 310.15(B)(3)(C) – Rooftop Ampacities – temperature “adder” table deleted. XHHW-two (2) exception retained.
- Article 310.15(B)(7) – Residential Service and Feeder Ampacity.
- Article 338.10(B)(4)(a) – SE Cable in Thermal Insulation – this change is not in the analysis. Revised requirement on temperature rating of cables installed in thermal insulation. Only cables with 10 AWG & smaller shall be required to default to 60 degree C ampacity.
- Article 404.22 – Connection of Switches with Power Supplies

At 2:30 p.m., the Board recessed for a short break.

At 2:45 p.m., the Board reconvened.

Continued review of the key changes:

- Article 406.4(D)(4) – AFCI Replacement
- Article 406.12 – Tamper-Resistant Expansion.
 - 24,000 children are admitted for electrical shocks per year.

An Arc-Fault video was reviewed.

The next regular Board meeting will be on November 16, 2016.

There being no further business, it was motioned by Kyle Miller and seconded by Tom Paulson to adjourn the meeting. The meeting was adjourned at 3:25 p.m.

Date

Date

Rodney Mayer, PRESIDENT

Tom Paulson, SECRETARY