

Meeting Minutes: Board of Electricity

Date: July 11, 2023
Time: 9:00 a.m.
Location: **In person/WebEx/Phone**

Members Present

1. Alfreda Daniels Juasemai – via WebEx
2. Thomas Fletcher
3. Cole Funseth – via WebEx
4. Sarah Gudmunson
5. Steve Haiby
6. Mike Hanson
7. Jeff Heimerl
8. Duane Hendricks – Chair
9. Dean Hunter – CO’s Designee
10. Travis Thul
11. Trevor Turek
12. Desiree Weigel – Secretary

Members Absent

None

DLI Staff & Visitors

Jeff Lebowski (Board Counsel)
Brittany Wysokinski (Board Counsel) – via WebEx
Lyndy Logan (DLI)
Hannah Mardaus (DLI)
Josiah Moore (DLI)
Sean O’Neil (DLI)
Clara Albert (Electrical Assn.) – via WebEx
Jon Boesche (ABC)
Michelle Dreier (Electrical Assn.)
Nick Erickson (Housing First MN)
Chad Kurdi (BVK Group) – via WebEx
Dan Moynihan (City of St. Paul) – via WebEx
Andy Snope (IBEW)
Jake Thoennes (UMN)
Shawn Weyer (JATC) – via WebEx

1. Call to Order

- A. **Roll Call:** Chair Hendricks called the meeting to order at 9:03 a.m. Roll call was taken by Secretary Weigel and a quorum was declared resulting in 12 of 12 voting members present in person or via WebEx.
- B. **Announcements/Introductions – Chair Hendricks**
 - Everyone present in person and remotely are able to hear all discussions.
 - All votes will be taken by roll call if any member is attending remotely.
 - All handouts discussed and WebEx instructions are posted on the [Board’s website](#).
- C. WebEx instructions/procedures were explained.

2. Approval of Meeting Agenda

A motion was made by Heimerl, seconded by Weigel, to approve the agenda as presented. The roll call vote was unanimous with 12 votes in favor of the motion; the motion carried.

3. Approval of Previous Meeting Minutes

A motion was made by Fletcher, seconded by Heimerl, to approve the Apr. 11, 2023, regular meeting minutes with a revision to the date of the meeting to read April 11, 2023. The vote was unanimous with 12 votes in favor of the motion; the motion carried.

4. Regular Business

- A. **Expense Approval** – Expense reports will be forwarded to Financial Services for payment.
- B. **Enforcement & licensing update** – Sean O’Neil – See **Attachment A**. Electrical Enforcement Actions can be found on the department’s website at:
<http://www.dli.mn.gov/business/electrical-contractors/electrical-enforcement-actions>

- O’Neil said laminated licensing cards are rolling out and the department is providing more testing sites.
 - Licensing switched to a new database, iMS, on May 8, 2023. They are currently working to enhance the search feature.
 - O’Neil said if licensees find non-public information posted online, such as test results, please reach out to the Licensing unit. Open enforcement actions are not public.
 - Weigel asked if multiple licenses can be merged to show up under each person’s profile – O’Neil said he would check with iMS.
 - Turek said the new iMS system is much better.
- C. **Inspection update** – Dean Hunter – see **Attachment B**.
- Due to a recent legislative change, solar installers must now have a residential building contractor license.
 - Hunter discussed the addition of another virtual inspector and taking on 9 new State inspection areas. The Northwest part of District 10 and District 7 are now fully State inspected areas and will have the virtual inspections program completely accessible.

5. Special Business

- A. Officer nominations – turn meeting over to Dean Hunter, Commissioner’s Designee
- Chair**
Turek nominated Duane Hendricks. There were no other nominations. The majority roll call vote ruled with 10 in favor and two abstentions (Hendricks and Hunter); Hendricks was re-elected as board Chair.
 - Vice-Chair**
Hendricks nominated Trevor Turek. There were no other nominations. The majority roll call vote ruled with 10 in favor; Turek was re-elected as board Vice-Chair.
 - Secretary**
Turek nominated Desiree Weigel. There were no other nominations. The majority roll call vote ruled with 10 in favor; Weigel was re-elected as board Secretary.
- Turn meeting over to Board Chair
- B. National Electrical Code Correlating Committee White Paper (see **Attachment C**) and presentation titled Proposed Structure Discussion (see **Attachment D**) – Dean Hunter
- Hunter said the Correlating Committee will continue to meet every two weeks up until Nov. 17, 2023.
 - Weigel asked if DLI will be trying to match the other code books how they have article 1300 from the building code in front of it. Hunter responded not that he is aware of. The NEC is a widely adopted, standalone book. It isn’t even written like the other NFPA documents. It would be dependent on if there are any changes to the style manual.
 - Turek asked if the sections and parts within the articles are going to be structured differently. Hunter said the overall layout of the sections and parts within the articles within are not going to change just that they will be moving within the chapter structure.
 - Turek is concerned about how the changes will impact existing licensees. He thinks that the first change shouldn’t be too big. He believes that changing some of the article numbers shouldn’t pose that big of a challenge to the existing licensees.

- Hunter acknowledged that Turek’s concern is good to be considered during this process.
- Hunter noted that it’s up to the board to decide if they want to proceed with supporting the NEC structure change and then if the letter Hunter drafted for the NEC Correlating Committee Chair should be sent out. He suggests that it doesn’t have to be decided right away if some of the board members need a week to look it over.
- Hansen said the last bullet in the proposed letter is the most important. The realignment of the NEC structure will better help facilitate code compliance and translate more effectively with the search function on electronic copies.
- Hendricks said it makes sense for the board to support this. If the board felt like they were ready to support the NEC structure change and the letter being sent out, as is or revised, then two motions would need to be made.
- Heimerl asked if the letter could be reviewed for 10 days and then members could vote.
- Hendricks said the next official meeting would be in October and the vote will be in November for the changes. This wouldn’t give Dean much time to apply the changes. Hendricks asked if anyone needed more time to review the letter before it’s sent and reminded the board that the changes mentioned in the letter wouldn’t technically need to be upheld if modifications were needed.
- Lebowski informed the board that if they decided to hold off for ten days, they would have to hold a special meeting to discuss and vote.
- Hendricks asked if any members want more time to support the structured changes as presented by Hunter.
- Heimerl said he is in support and doesn’t need more time to review.
- Fletcher suggested adding a sentence or paragraph that would mention that the NEC structure changes being proposed would consider the existing workforce.
- Hansen asked if it’s possible to make a motion to support the letter while also giving Dean the discretion to add the comment about the consideration towards the current workforce in changing the NEC structure.
- Hendricks said that was a good idea.

A motion was made by Fletcher, seconded by Haiby, to support the letter and empowering Dean to add a comment about the consideration of the current workforce regarding the NEC Structure change. The vote was unanimous with 12 votes in favor of the motion; the motion carried.

In conclusion, the Board agrees with the statement, “... the structure of the NEC plays a critical role for personnel in learning, understanding, applying, and enforcing the requirements established within this regulatory code” and supports the work of the Correlating Committee authorizing Dean Hunter to send the letter to Mr. Lawrence Ayer.

C. 2023 NEC Adoption Update – Dean Hunter

- Hunter addressed the board about code change for the NEC 2026. Public input must be submitted by Sept. 7, 2023. He informed that one doesn’t have to be a NFPA member to submit a code change proposal. After the public input submittal date, the NFPA will come out with designated dates for technical board meetings, which is presumed

to be in January of 2024. The first draft of the 2026 NEC should be out around June of 2024. Hunter said that MN DLI staff has submitted 34 code changes themselves.

- Lebowski said the 2023 NEC passed through successfully and the July 1, 2023, effective date was met.

Thul departed the meeting at 10 a.m., resulting in 11 voting members present in person or via WebEx.

6. Committee Reports

Construction Codes Advisory Council (CCAC) met on Jun. 1, 2023 – Hendricks (rep) / Daniels (alt) – [Presentation June 1, 2023](#)

7. Complaints and Correspondence

None

8. Open Forum

None

9. Board Discussion

- Officers were thanked for continuing to serve.
- Hunter informed the board about the 2023 NEC FAQ page. The FAQ is a fluid document, posted online, and continually updated.

10. Announcements

Regularly scheduled meetings occur on the second Tuesday of each quarter at 9:00 a.m., in person at DLI with WebEx/Phone options

- October 10, 2023
- January 9, 2024
- April 9, 2024
- July 9, 2024 (Annual meeting – election of officers)

11. Adjournment

A motion was made by Heimerl, seconded by Gudmunson, to adjourn the meeting at 10:49 a.m. The roll call vote was unanimous with 11 votes in favor of the motion; the motion carried.

Respectfully Submitted,

Desiree Weigel

Desiree Weigel
Secretary

Green meeting practices

The State of Minnesota is committed to minimizing environmental impacts by following green meeting practices. DLI is minimizing the environmental impact of its events by following green meeting practices. DLI encourages you to use electronic copies of handouts or to print them on 100% post-consumer processed chlorine-free paper, double-sided.

Contractor fined \$45,000 for failing to complete projects

- A licensed Blaine residential building contractor was found to have breached contracts with several homeowners by failing to complete projects after receiving payments. DLI revoked the contractor's license and assessed a \$45,000 fine.
- A licensed Sleepy Eye residential building contractor was found to have engaged in elevator work without being licensed. The contractor was censured, ordered to cease and desist from performing elevator work and fined \$5,000, which was stayed contingent on future compliance.
- A licensed Chaska electrical contractor failed to comply with supervision requirements. The contractor was censured and fined \$8,000, of which \$5,000 was stayed contingent on future compliance.
- An unlicensed contractor based in Cottage Grove was found to have engaged in unlicensed residential building contractor and plumbing activities. The contractor was ordered to cease and desist from engaging in the unlicensed activity and fined \$10,000, of which \$6,000 was stayed contingent on future compliance.
- An Alabama contractor was found to have engaged in unlicensed electrical work. The contractor was ordered to cease and desist from the unlicensed activity and fined \$5,000, of which \$4,000 was stayed contingent on future compliance.



Enforcement actions

View enforcement and license actions levied against licensees.

More information

View summaries of enforcement actions at dli.mn.gov/workers/homeowners/file-complaint-and-view-enforcement-actions. Contact us at 651-284-5069 or dli.contractor@state.mn.us.

Total Active	Date Range Activity			Issued Permits	Aging of Expired Permits			
Current Count	IN Count	OUT Count	Net Change Count	< 12 Months Count	12-18 Months Count	18-36 Month Count	> 36 Months Count	> 12 Months Count
75,953	65,247	68,681	(3,434)	60,682	6,271	7,491	1,008	14,770
Percentage of Current Active Permits								
	86%	90%	-5%	80%	8%	10%	1%	19%

	<u># of Inspections Performed</u>	<u>Inspection Reports</u>	<u>AFBs</u>	<u>Refunds</u>	<u>License Checks</u>	<u>Violation Reports</u>
For Date Range:	92,241	10,630	11,154	3,510	240	0
Year to Date Total:	92,241	10,630	11,154	3,510	240	0

Total Active: The total current active permits ("Issued", "Expired" or "Hold" status).

Date Range Activity: The permits that were Issued and permits closed out and the net change for the selected date range.

Issued Permits: Represents the number of permits that are currently less than 12 months old.

Expired Permits: Permits for installations filed with inspection fees of \$250 or less are void 12 months from the original filing date regardless of whether the wiring is completed. Permits filed with inspection fees of \$250 or less are not refundable after 12 months from the original filing date. The authority to install electrical wiring associated with a specific permit is void at the time of a final inspection or expiration, whichever occurs first. The authority to inspect wiring covered by a permit continues until the installation is approved at a final inspection.

Aging of Expired Permits: Represents the age of expired permits that are still active. This does not include any permits that have a value over \$250.

For Date Range: Represents the numbers in the respective columns during that date range. Violation reports are yet to be counted by this report.

Year to Date Total: Represents the numbers for the calendar year beginning January 1st.

%: Represents the percentage compared to "Current".

AFBs: Additional Fees for Billings (invoices for inspection fee shortages)

Electrical Permit and Inspection History

State Inspection Areas

CALENDAR YEAR	Permit Information			Inspection Information		
	Total Permits Issued	Permits Completed	Permits Closed but Not Finaled	Final "Final" Insp.*	All other Insp.**	Total Inspections
2020	126,124	123,931	6,166	107,372	55,445	162,817
2021	130,552	124,592	6,956	117,486	60,858	178,344
2022	138,228	106,584	4,093	121,905	61,186	183,091
2023	65,244	29,612	1,154	63,370	28,614	91,984

The "**Permit Information**" and the "**Inspection Information**" do not necessarily represent the same permits. The "Permit Information" represents permits issued that Calendar Year. The "Inspection Information" represents the inspections performed that calendar year. The inspections may be for permits that were issued in previous calendar years.

"Total Permits Issued" means the permits Issued in the calendar year indicated. Includes permits in status (milestone) 'Abandon', 'Closed', 'Expired', 'Finaled', 'Issued', or 'Hold'. Does not include any other milestone such as "Out of state Inspected Area", "Refunded", etc.

"Permits Completed" means the "Total Permits Issued" for the calendar year, this is the number of permits placed into 'Closed', 'Expired', 'Abandon', or 'Finaled' status .

"Permits Closed but Not Finaled" means of the "Permits Completed" for the year, this is the number of those permits placed by procedural policy into 'Closed', 'Expired', or 'Abandon' status .

"Final "Final" Insp." represents the number of inspections completed that calendar year that caused the permits to be placed into "Finaled" status or milestone. The permits were not necessarily issued that year.

"All other Insp." represents the number of inspections completed that calendar year that did not result in a ""Finaled" status or milestone. The permits were not necessarily issued that year.

"Total Inspections" represents the total (Finals and Others) number of inspections completed that calendar year. The permits were not necessarily issued that year.

Electrical Permits Issued Summary

Issued from 1/1/2023 to 7/6/2023

ELE Permit Type	New Structure or Existing and/or Other Assoc. Items	Number of Permits Issued	% of Permit Type	% of Total
Multi-Family Dwelling	Existing Building or Other Items	985	85.36%	1.53%
	New Building	169	14.64%	0.26%
	Total	1,154		1.80%
Non-Dwelling	Total	14,629		22.77%
One-Family Dwelling	Existing Dwelling or Other Items	32,706	84.69%	50.91%
	New Dwelling	5,914	15.31%	9.21%
	Total	38,620		60.12%
One-Family Home (Homeowner Issued Permit)	Existing Home or Other Items	3,219	82.39%	5.01%
	New Home	688	17.61%	1.07%
	Total	3,907		6.08%
Technology Systems	Total	468		0.73%
Transitory (Carnival, etc.)	Total	637		0.99%
Two-Family Dwelling	Existing Building or Other Items	229	89.11%	0.36%
	New Building	28	10.89%	0.04%
	Total	257		0.40%
Utility Load Management Device	New Device	1,047	22.92%	1.63%
	Replacement Device	3,522	77.08%	5.48%
	Total	4,569		7.11%
Total		64,241		

Issued Electrical Solar Permits Summary

Issued from 1/2/2023 to 7/6/2023

Permit Type Type of Dwelling or Non-Dwelling	Permit Variant New or Existing	Solar Systems Grouped by Size	No of permits	Percentage of Group	Solar Systems Grouped by Size	No of permits	% of Total
Multi-Family Dwelling			13	0.76% Of Total	10K or <	1,035	60.39%
	Existing Building or Other Items		10	76.92% of Type	10K to 40K	496	28.94%
		10K or <	2	20.00% of Variant	40K to 1 meg	57	3.33%
		10K to 40K	5	50.00% of Variant	Not Given	2	0.12%
		Unknown	3	30.00% of Variant	Unknown	124	7.23%
	New Building		3	23.08% of Type	Total	1,714.00	
		10K to 40K	1	33.33% of Variant	Solar Systems Grouped by Size	Watts	% of Total
40K to 1 meg		2	66.67% of Variant	10K or <	5,599,959	13.93%	
Non-Dwelling			208	12.14% Of Total	10K to 40K	9,677,526	24.07%
	Non-Dwelling		208	100.00% of Type	40K to 1 meg	24,933,269	62.01%
		10K or <	43	20.67% of Variant	Not Given		0.00%
		10K to 40K	105	50.48% of Variant	Unknown	Unknown	
		40K to 1 meg	41	19.71% of Variant	Total	40,210,754	
		Unknown	19	9.13% of Variant	Average	25,322	
One-Family Dwelling			1,446	84.36% Of Total			
	Existing Dwelling or Other Items		1,381	95.50% of Type			
		10K or <	939	67.99% of Variant			
		10K to 40K	337	24.40% of Variant			
		40K to 1 meg	12	0.87% of Variant			
		Not Given	2	0.14% of Variant			
		Unknown	91	6.59% of Variant			
	New Dwelling		65	4.50% of Type			
		10K or <	27	41.54% of Variant			
10K to 40K		36	55.38% of Variant				
One-Family Home (Permit Issued to Homeowners)			46	2.68% Of Total			
	Existing Home or Other Items		38	82.61% of Type			
		10K or <	17	44.74% of Variant			
		10K to 40K	11	28.95% of Variant			
		40K to 1 meg	2	5.26% of Variant			
		Unknown	8	21.05% of Variant			
	New Home		8	17.39% of Type			
10K or <		6	75.00% of Variant				

Issued Electrical Solar Permits Summary

Issued from 1/2/2023 to 7/6/2023

One-Family Home (Permit Issued to Home)	New Home	10K to 40K	1	12.50% of Variant
		Unknown	1	12.50% of Variant
Two-Family Dwelling			1	0.06% Of Total
	Existing Building or Other Items		1	100.00% of Type
		10K or <	1	100.00% of Variant
Total			1,714	

Minnesota Board of Electricity c/o Department of Labor and Industry

443 Lafayette Road North
Saint Paul, MN 55155-4344
dli.cclboards@state.mn.us

Attachment C

Mr. Lawrence Ayer
NEC Correlating Committee, Chair
2867 Stanton Avenue
Cincinnati OH 45206

Dear Mr. Ayer,

The Minnesota Board of Electricity represents many electrical stakeholder groups across our state. The membership of the Board represents: inspectors, rural electric suppliers, electrical contractors, licensed workers, technology system contractors, engineers, and the public. One of the main duties of the Board is to adopt the most current edition of the National Electrical Code (NEC). On behalf of the Minnesota State Board of Electricity membership, I am excited to express our support for the proposed NEC structure and realignment. The new arrangement, as proposed, will make the NEC a more user-friendly document, and thus support the electrical industry in Minnesota through clear understanding and enforcement.

The Board has reviewed the National Electrical Code Correlating Committee White Paper Keeping the NEC® Relevant - Is Now the Time to Modernize? and agrees that based on industry trends, a change to the NEC's structure may be in order. The Board supports the proposed structure changes for the following reasons:

- Continued improvement of the medium voltage articles
- Reorganization and streamlining of the limited energy articles, understanding that these systems are not considered "special systems" as they are grouped in Chapters 7 and 8. These systems are very common in all types of buildings and structures
- Expansion and realignment to incorporate future technologies
- Parallel numbering with common chapters and articles to enhance user understanding which promotes code compliance and safe installations

In conclusion, the Board agrees with the statement, "... the structure of the NEC plays a critical role for personnel in learning, understanding, applying, and enforcing the requirements established within this regulatory code", and supports the work of the Correlating Committee.

Sincerely,

Board of Electricity- Department Liaison

Dean Hunter

NBFU Pamphlet No. 70

1940

NATIONAL ELECTRICAL CODE

STANDARD

National Board of Fire Underwriters

ELECTRIC WIRING

AND APPARATUS

AS RECOMMENDED BY THE

NATIONAL FIRE PROTECTION ASSOCIATION

AMERICAN STANDARD

Approved August 7, 1940

AMERICAN STANDARDS ASSOCIATION

NATIONAL BOARD OF FIRE UNDERWRITERS

N B F U Pamphlet No. 70

1935

"NATIONAL ELECTRICAL CODE"

REGULATIONS

OF THE

National Board of Fire Underwriters

FOR

ELECTRIC WIRING

AND

APPARATUS

AS RECOMMENDED BY THE

NATIONAL FIRE PROTECTION ASSOCIATION

AMERICAN STANDARD

1935

ASSOCIATION

Effective November 1, 1935

NATIONAL BOARD OF FIRE UNDERWRITERS

Proposed 2029 NEC Structure

Minnesota Board of Electricity

1940 NEC Structure

- Special Articles
 - 5- Chapter 5 Articles
 - 7- Chapter 6 Articles
 - 4- Chapter 7 Articles
- Communications
 - 2- Chapter 8 Articles

... fundamental rules which state only fundamentals or objectives of safeguarding. These are followed by paragraphs setting forth the recognized methods and details which the purpose and intent of the fundamental may be satisfied. Accordingly, when employed, the rules stating a fundamental only will appear as the first paragraph of an article or section.

Definitions. Article 100 contains definitions of a number of terms used in this Code which will facilitate their correct interpretation and application. For definitions of terms not so listed, reference may be made to the standard definitions of electrical terms.

Code Arrangement. The first four chapters of the Code are of general application. Chapters 5, 6 and 7 apply to installations which involve special occupancies, special equipment or other special conditions. These chapters are supplementary to, or amendatory of, the general rules, and the latter apply under such circumstances except as so amended for the particular conditions. Chapter 8 governs installations of communication systems, and is independent of the preceding chapters except as they may be specifically referred to. Chapter 9 covers construction specifications. The larger tables, examples...

2020 NEC Structure

- Special Articles
 - 27- Articles in Chapter 5
 - 27- Articles in Chapter 6
 - 15- Articles in Chapter 7
- Communications
 - 6- Articles in Chapter 8

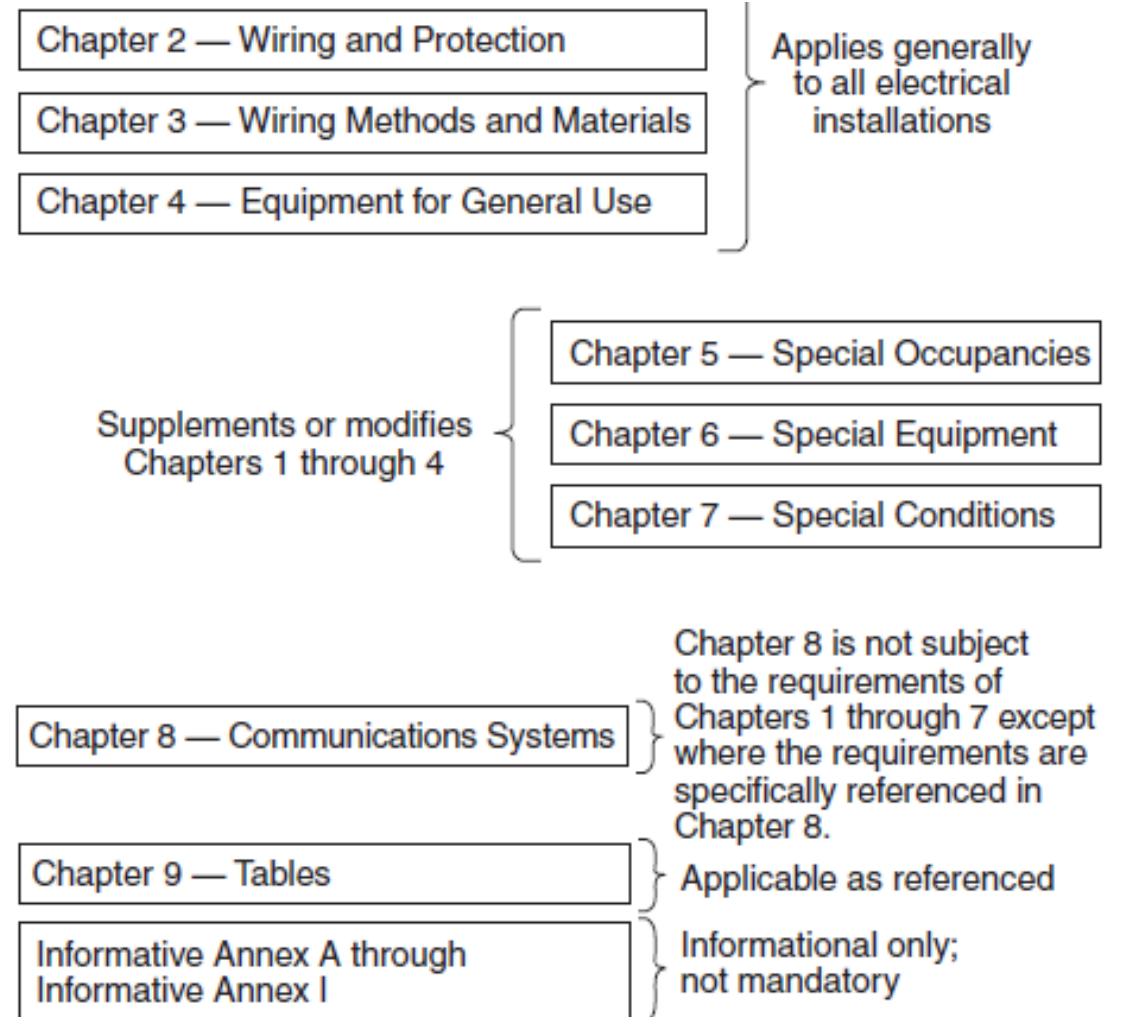


Figure 90.3 Code Arrangement.



Chapter 1
General



Chapter 2
Wiring & Protection



Chapter 3
Wiring Methods
& Materials



Chapter 4
Equipment for
General Use



Chapter 5



Chapter 6
Special Equipment



Chapter 7
Special Conditions



Chapter 8
Communications
Systems

CURRENT STRUCTURE

Does the current NEC Articles and requirements align with 90.3?

How easy is this structure to understand?

What is the difference between a general requirement and a special requirement?

CURRENT STRUCTURE

Is a Control System for Permanent Amusement Attraction an occupancy?

Are **Electrified Truck Parking Spaces** a piece of electrical equipment?

Is a **Modular Data Center** a piece of electrical equipment?

Is **Electroplating** a piece of electrical equipment?

Are **Swimming Pools** a piece of electrical equipment?

Is a **Natural and Artificial Body of Water** a piece of electrical equipment?

Are **Large Scale Solar Photovoltaic (PV) Electric Power Production Facilities** a piece of electrical equipment?

Is **Instrumentation Tray Cable** a condition? **(Since moved to Chapter 3)**

Is **Fire-Resistive Cable Systems** a condition?

Evolution is Necessary for Survival

- A lot has changed since 1937
 - “Digital Revolution” is changing how we get our information
 - “Gen Z” is the first generation to grow up with access to the internet, digital technology, social media
 - Product Standards continue to harmonize across the world
 - DC is emerging as the new AC
 - The paradigm of utilities being the predominate source of energy is shifting

Founded to sell watches;
evolved to sell everything

Founded to sell books;
evolved to sell everything

1972

2017

sears

amazon

2 of every 3
Americans shopped
in last 3 months

2 of every 3
Americans shopped
in last 3 months

1987 Sales = 1% of GDP

2017 Sales = 1% of GDP

Merriam
Associates

Source: Chicago Tribu

LOG IN REGISTER S

The 2020
Code Changes
are here!



EC&M
CodeChange
CONFERENCES



NATIONAL ELECTRICAL CODE

NFPA Unveils New Virtual Reference Tool

Association to launch digital NFPA LiNK in September

AUG 05, 2020



On August 4, NFPA announced the launch of a new virtual product coming soon. NFPA LiNK, a new digital subscription-based reference tool for codes and standards, will be available on Sept. 21, 2020,

Elevate your customer service. Get field service management.

Where do we want to go?

- Remain relevant with the quickly evolving electrical industry
- Improve usability
 - Eliminate redundancy
 - Place content where it makes sense
 - Logical/parallel structure
 - Improve Limited Energy content
 - Improve MV Content
 - Eliminate “Special Equipment” - Equipment is Equipment
 - Leverage the past to make the future even better
- Look to the future



Keeping the
NEC Relevant
Now is the
Time to
Modernize

Industry Trends

Medium Voltage

Limited Energy

Multi-Directional Power Flow

Digital Delivery of Content

Future Vision

Path Forward

Feedback

Introduction
Definitions and General Requirements Chapter 1
Wiring and Protection Chapter 2
Wiring Methods and Materials Chapter 3
Equipment for General Wiring Chapter 4
Special Occupancies Chapter 5
Special Equipment Chapter 6
Special Conditions Chapter 7
Communication Systems Chapter 8
Tables Chapter 9
Informative Annex A through Informative Annex K

90.3 (2023 NEC and 2026 NEC)

Applies generally to electrical installations

Requirements that Supplement or Modify Chapters 1 through 7

Chapter 8 is not subject to the requirements of Chapters 1 through 7 except where referenced in Chapter 8 {excerpt}

Applicable as referenced

Information only; not mandatory

Parallel Structure (2023)

Wiring and Protection

- 210 Branch Circuits
- 215, 225 Feeders
- 230 Services
- 235 Branch, Feeders and Services
- 240 Overcurrent Protection
- 242 Overvoltage Protection
- 245 Overcurrent Protection
- 250 Grounding

Wiring Methods

- 300 General Req
- 305 General Requirements
- 310 Conductors and Cables
- 315 MV Conductors and Cables

Special Conditions

- 722 Ltd Energy Cables
- 724 Class 1 ...
- 725 Class 2 and 3
- 726 Class 4

Communication Systems

- 800 General Requirements
- 805 Communication Circuits
- 810 Antenna Systems
- 820 Community Antenna Television and Radio Distribution
- 830 Network-Powered Broadband Communication Systems
- 840 Premises-Powered Broadband Communications Systems

Parallel Structure (2026)

Wiring and Protection

- 210 Branch Circuits
- 215, 225 Feeders
- 230 Services
- 235 Branch, Feeders and Services
- 240 Overcurrent Protection
- 242 Overvoltage Protection
- 245 Overcurrent Protection
- 250 Grounding

Wiring Methods

- 300 General Req
- 305 General Requirements
- 310 Conductors and Cables
- 315 MV Conductors and Cables

Special Conditions

- XXX General Requirements
- 722 Ltd Energy Cables (Move Cables from Ch.8)
- Xxx Overcurrent Protection
 - (Class 2,3,4)
- Xxx Overvoltage Protection
- XXX Grounding

Communication Systems

- 800 General Req
- 805 POTS
- 810 Antenna Systems
- 820 Community Antenna Television and Radio Distribution
- 830 Network-Powered Broadband Communication Systems
- 840 Premises-Powered Broadband Communications Systems

Parallel Structure (2029)

Wiring and Protection

- 200 General Req
- 205 Conductors and Cables
- 210 Branch Circuits
- 215, 225 Feeders
- 230 Services
- 240 Overcurrent Protection
- 242 Overvoltage Protection
- 250 Grounding

Wiring and Protection >1000V

- 300 General Req
- 305 MV Conductors and Cables
- 330 Branch, Feeders and Services
- 340 Overcurrent Protection
- 342 Overvoltage Protection
- 350 Overvoltage Protection

Wiring and Protection Limited Energy

- 400 General Requirements
- 405 Ltd Energy Cables
- 430 Outside Plant
- 440 Overcurrent Protection
 - (Class 2,3,4)
- 442 Overvoltage Protection
- 450 Grounding

Communication Systems

- ~~805 Communication Circuits~~
- ~~810 Antenna Systems~~
- ~~820 Community Antenna Television and Radio Distribution~~
- ~~830 Network-Powered Broadband Communication Systems~~
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Applies generally to electrical installations

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