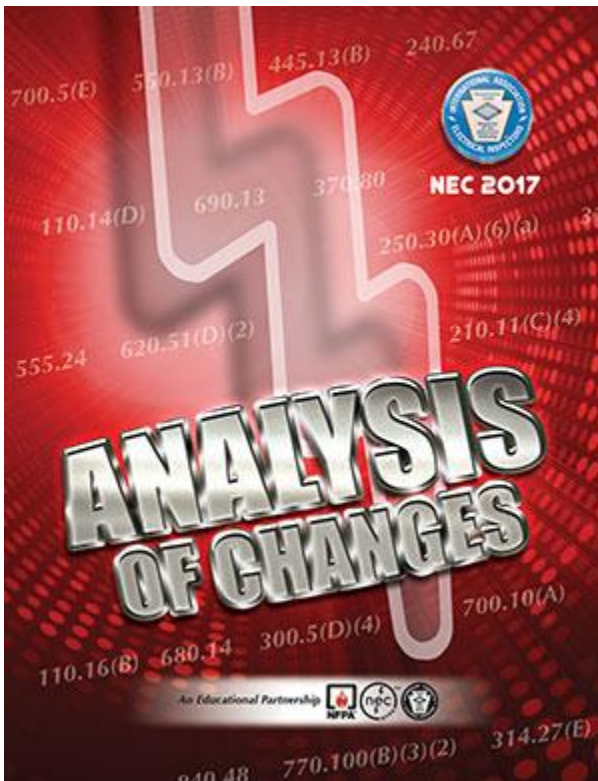




Montana Chapter IAEI

Attn: Marjorie Edwards
23 Piper Way
Three Forks, MT 59752

Analysis of Changes, NEC 2017



MT Chapter IAEI

Course Location & Date:

Billings Hotel & Convention Center
Formerly (The Red Lion)

1223 Mullaney Ln

Billings, MT 59101

March 26, 2018 = 8 HRS CEU Code

See Attached Class Schedule

Item #361024. Be the first to learn the most essential changes to the 2017 NEC®. Written by industry experts who sit on the NEC® code-making panels, this comprehensive book is a must-have resource you will reference throughout the years. This edition covers 255 reported changes. Five new articles include: Energy Storage Systems, Article 706; Large-Scale PV Electric Power Production, Article 691; Stand-Alone Systems, Article 710; Direct-Current Microgrids, Article 712; and Fixed Industrial Process Heating, Article 425. Five improvements to the NEC® include Single-Phase Dwelling Services & Feeders, 310.15(B)(7); GFCI Protection for Non-Dwelling Units, 210.8(B); Reconditioned Equipment, ID & Traceability, 110.21(A)(2); Short-Circuit Current Documentation, 9 locations throughout; and Limited Access Working Space Requirement, 110.26(A)(4).

Table of Contents

Introduction

- 10 Code-Wide Changes
- 12 New Articles for the 2017 NEC
- 16 90 Introduction

Chapter 1: General, Articles 100 – 110

- 19 100 Definitions
- 30 110 Requirements for Electrical Installations

Chapter 2: Wiring and Protection, Articles 210 – 250

- 46 210 Branch Circuits
- 89 215 Feeders
- 92 220 Branch-Circuit, Feeder, and Service Calculations
- 94 225 Outside Branch Feeders and Circuits
- 96 230 Services
- 100 240 Overcurrent Protection
- 104 250 Grounding and Bonding

Chapter 3: Wiring Methods, Articles 300 – 370

- 135 300 Wiring Methods and Materials
- 140 310 Conductors for General Wiring
- 148 312 Cabinets, Cutout Boxes, and Meter Socket Enclosures
- 156 314 Outlet, Device, Pull, & Junction Boxes; Conduit Bodies; Fittings; and Handhole Enclosures
- 163 320 Armored Cable: Type AC
- 166 324 Flat Conductor Cable: Type FCC
- 168 336 Power and Control Tray Cable: Type TC
- 171 344 Rigid Metal Conduit: Type RMC
- 173 350 Liquidtight Flexible Metal Conduit: Type LFMC
- 175 358 Electrical Metallic Cable: Type EMT
- 178 366 Auxiliary Gutters
- 180 370 Cablebus

Chapter 4: Equipment for General Use, Articles 404 – 480

- 184 404 Switches
- 192 406 Receptacles, Cord Connectors, and Attachment Plugs (Caps)
- 215 408 Switchboards, Switchgear, and Panelboards
- 218 409 Industrial Control Panels
- 220 410 Luminaires, Lampholders, and Lamps
- 223 411 Lighting Systems Operating at 30 Volts or Less and Lighting Equipment Connected to Class-2 Power Sources
- 226 422 Appliances
- 240 424 Fixed Electric Space-Heating Equipment
- 250 425 Fixed Resistance and Electrode Industrial Process Heating Equipment
- 254 426 Fixed Outdoor Electric Deicing and Snow-Melting Equipment
- 256 430 Motors, Motor Circuits, and Controllers
- 263 440 Air-Conditioning and Refrigerating Equipment
- 268 445 Generators
- 280 480 Storage Batteries

Chapter 5: Special Occupancies, Articles 500 – 590

284	500 Hazardous (Classified) Locations, Classes I, II, and III, Divisions 1 and 2
291	501 Class I Locations
296	511 Commercial Garages, Repair and Storage
303	514 Motor Fuel Dispensing Facilities
313	516 Spray Application, Dipping, and Coating Process
315	517 Health Care Facilities
334	520 Theaters, Audience Areas of Motion Picture and Television Studios, Performance Areas, and Similar Locations
338	525 Carnivals, Circuses, Fairs, and Similar Events
341	547 Agricultural Buildings
343	550 Mobile Homes, Manufactured Homes, and Mobile Home Parks
350	551 Recreational Vehicles and Recreational Vehicle Parks
360	555 Marinas and Boatyards
370	590 Temporary Installations

Chapter 6: Special Equipment, Articles 600 – 695

377	600 Electric Signs and Outline Lighting
392	605 Office Furnishings
394	610 Cranes and Hoists
396	620 Elevators, Dumwaiters, Escalators, Moving Walks, Platform Lifts, & Stairway Chairlifts
398	625 Electric vehicle Charging System
408	645 Information Technology Equipment
416	650 Pipe Organs
419	660 X-Ray Equipment
421	670 Industrial Machinery
423	680 Swimming Pools, Fountains, and Similar Installations
446	682 Natural and Artificially Made Bodies of Water
458	690 Solar Photovoltaic (PV) Systems
503	691 Large-Scale Photovoltaic (PV) Electric Supply Stations
506	695 Fire Pumps

Chapter 7: Special Conditions, Articles 700 – 770

511	700 Emergency Systems
525	701 Legally Required Standby Systems
528	702 Optional Standby Systems
531	705 Interconnected Electric Power Production Sources
533	706 Energy Storage Systems
537	708 Critical Operations Power Systems (COPS)
539	710 Stand-Alone Systems
541	712 Direct Current Microgrids
544	725 Class 1, Class 2, and Class 3 Remote-Control, Signaling, and Power-Limited Circuits
553	727 Instrumentation Type Cable:Type ITC
558	760 Fire Alarm Systems
559	770 Optical Fiber Cables and Raceways

Chapter 8: Communications Systems, Articles 810 – 840

572	810 Radio and Television Equipment
574	840 Premises-Powered Broadband Communications Systems

Chapter 9: Tables and Annex D

582	Notes to Tables
584	Informative Annex D