Electric Service Rules
Summary of Changes
2020

Chapter 1:
107.F.2: Removed exception allowing wiring statements because both States have now adopted 2017 NEC.
108: Added note 3 – formerly located in 613.G.
109: Clarified primary services and exceptions
109.1.a & 3: Simplified language
110: Added the 277/480 3 Phase Breaker Rating & Short Circuit Current Rating
110 & 116: Added 320 service ampacity for residential customers
119.G: Added reference to ESR 603 ‘Identification of Meters’

Chapter 2:
201: Updated table for clarification - WI Only

Chapter 3:
302: Removed 3 Service Risers/Disconnects drawing per NEC
     Deleted notes 3 & 4 as they no longer apply
305: Updated table for clarification - WI Only
306: Updated table for clarification - WI Only

Chapter 4:
Updated 300A to 320A where needed
404.C: Clarified language
408-412: 3PH pad options were updated and designs reviewed by ECI
• Per requests, options for foundation walls were added back in (removed in 2019)
• Added summary section before 408 to explain all 3PH transformer pad options
• Added 409: foundation walls for standard transformer pad
• Added note to 410 to say joint pads not allowed where livestock may be present
• Added 411: side by side joint pad with foundation walls - this side by side design must be used with foundation walls because conduit runs are difficult
Chapter 5:
Updated 300A to 320A where needed
507: Updated Dual Power Source label
507.B Clarified language
509: Made the requirement visible from the electric meter Iowa only.
511-523: Updated headings to include 3-Phase

Chapter 6:
Updated 300A to 320A where needed
602: Clarified language in Exception No. 4
Updated drawing
602.D: Added a new note
605: Added note that customers must use cabinet raceway as designed and locate their conduits beneath these raceways
606: Corrected height dimension
606.A: Expanded on the indoor metering requirements
607.B: Clarified language
609: Changes per Civil Engineer review & drawing revisions
610.B Revised drawing
611: Added underground drawings
Clarified note 7
Updated table
613.A: Changed shall to should
613.C: Added informational note
613.D: Clarified language
613.E: Moved notes to be opposite page with drawings
613.F: Removed notes, only applied to farm installations
613.G: Moved to Chapter 1 (108 note 3)
613.H: Removed 2 pages of notes - replaced with new table
613A: Added notes opposite page to drawing
613B/C: Combined into one section for UG service

Chapter 7:
705: Clarified wording “Per NEC”

Chapter 8:
804A: Updated table for clarification - WI Only
804B: Updated table for clarification - WI Only
804C Clarified note 2
805: Clarified note 2
805: Drawing updated for clarification
806A: Updated table for clarification - WI Only
806A: Clarified note 2
806B: Clarified note 2
807: Clarified note 5
Chapter 9:
902: Clarified notes 1-2
    Added new Note 3 allowing for a reduced clear space with approval
902: Revised Drawings 902_1 and 902_2 for clarification

Chapter 10:
1000: Clarified note D
1002: Drawing revised
1003: Clarified the OH Primary Service section for customers served by existing
    Primary OH only
    Clarified note 4
    Updated Drawings 1002 & 1003 for clarification

Chapter 11:
1101: Clarified note B and C

Chapter 12:
No changes made

Chapter 13:
No changes made

Chapter 14:
No changes made

Chapter 15:
1500-1503: Removed the Renewable Hotline phone number per their request.
Electric Service Equipment
Summary of Changes
2020

ESE Overall Changes:
Reformatted equipment listings in all sections
• Now listed in each section by manufacturer
• “Multiple” manufacturers now listed by name
• “Multiple options” for equipment now listed next to part number instead of in the notes

General Information:
Added new contact e-mail: ESR_Team@alliantenergy.com

Chapter 1: Meter Sockets:
E100.B.1: Updated to reflect 320A sockets for residential
E100.C. Table 1: Updated to reflect 320A sockets for residential
Chapter 1 Notes: Reduced notes from 37 to 16 by combining and adding options to part numbers under new format
E101-E119: Moved all overhead only sockets to MAINTENANCE ONLY sections
E101M-E119M: Created new MAINTENANCE ONLY sections
E101A: New section for 320A residential services. Meter sockets listed in this section can now be used w/2 - 200A mains after the meter socket. All lever bypass.
Added from Durham, Eaton, MEP:
1008541
Added from Durham, Eaton, MEP, Square-D:
1008540
Added from Milbank:
U1797-O-K3L-K2L-ALT and U3000-O-K3L-K2L-ALT
Added from Siemens/Talon:
48104-82WI (60162 Lugs)
48704-82GP
48004-82
E102A: New section for 320A residential services. Meter sockets listed in this section will have built in mains adding up to 400A. All lever bypass.
Added from Milbank:
U5059-X-2/00-K3L
E112A: New section for 320A residential services. Meter pedestals listed in this section can now be used w/2 - 200A mains after the meter socket. All lever bypass.
No manufacturers have requested to be listed yet
E113A: New section for 320A residential services. Meter pedestals listed in this section will have built in mains adding up to 400A. All lever bypass.

Added from Milbank:
U6317-O-2/200-K3L

ESE Chapter 1: Equipment No Longer Approved
Removed the following as Square D equipment as they are no longer being manufactured (these are still available from Durham, Eaton and Midwest)

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1009843-( )
1008541-( )
1009842-( )
1009565-( )
1009846-( )

Milbank U5706: Rotated left lug and not enough bending space for 4/0 and 350 services.

Eaton catalog numbers removed after confirmation they are discontinued by manufacturer
ECP5#1*####

Eaton catalog numbers removed from E108 as it is limited to 120/208V 1 PH to 200 amps.
We do not allow 120/208V single phase instrument rated socket to be fed from a 3 phase 120/208V termination cabinet - only a self-contained socket or meter stack rated 200 amps or less per position (max 2 positions in a stack).

CTAP325NCM8CH31
CTAT325NCM8CH31
CTAT326NCM8CH31
CTAT327NCM8CH31
CTAP3244NCM8CH31
**ESE Chapter 1: Equipment Added as Approved**

E103: Added from Milbank
- U6513-XL-BL-ALT

E106: Added from Siemens
- MC0408B1200JLT

E106M: Added from Siemens
- MC0816B1150JLT
- MC0816B1200JLT
- MC1224B1125JLC
- MC1224B1200JLC
- MC2040B1150JLC
- MC2040B1200JLC
- MC3042B1200JLC

E115: Added from Midwest:
- R281E1P6H034
- R281C1P6H034
- R281C1B6H034 (2 position)

E116: Added from Midwest:
- R101CB6HP (2 position)
- R101CP6HP (1 position)
- M654CP6
- R281C1B6H (2 position)
- R281C1P6H (1 position)

E117: Added from Midwest:
- M654CP6

**ESE Chapter 1: Equipment Listing Changes**

U3850-0-TG-KK-ALT - change from UG to OH/UG, socket comes with OH hub

U3850-0-TG-KK-5T - change from UG to OH/UG, socket comes with OH hub

1008542 - change from OH/UG to OH, too narrow for UG

1008539 - change from OH/UG to OH, too narrow for UG

U5701-O-100S - moved from E115 to E116, online listing shows mobile home usage

U5702-O-100S - moved from E115 to E116, online listing shows mobile home usage

U5701-O-200S - moved from E115 to E116, online listing shows mobile home usage

U5702-O-200S - moved from E115 to E116, online listing shows mobile home usage

MC16B1100RJB - change to OH only, listed with 2/0 lugs

UHT#R1121* - change to OH only, listed with 2/0 lugs

UHT2R1121* - change to OH only, listed with 2/0 lugs

MPH#125 - change to OH only, listed with 2/0 lugs

WPC2211RJB - change to OH only, listed with 300 lugs
Chapter 2: Metering Cabinets:
Chapter 2 Notes - reformatted and updated notes
Corrected two Erickson catalog numbers per their request
Added note to AMP cabinets indicating an option for a R (right) or L (left) wireway
E200.B.4. - added that all fasteners shall be captive hardware

ESE Chapter 2: Equipment Added as Approved
No new approvals

Chapter 3: Additional Equipment Information:
Chapter 3 Notes – reduced notes from 17 to 6 by combining and adding options to part numbers under new format
E310.B – added note 6 for lifting eyes for instrument transformers
E312-E314: rearranged and renumbered to reformat and save a page
E314: OH to UG Service Conversion Kit – changed ITEM ID to new CU Code created for these conversions
E315. Wire bending requirements – removed section due to confusion

ESE Chapter 3: Equipment Added as Approved
E303C: Added from Siemens
WEB1400BA3
WEB3400BB3

E304C: Added from Siemens
WEB1600BA4
WEB3600BB4

E305B: Added from Siemens
WET1800BUB18
WET3800BUB12

E305C: Added from Siemens
WEB1800BA6
WEB3800BB6

E306C: Added from Siemens
WEBM31200B9
WEBM31200BUB9
WEB31200BB9
E311.E: Added from Kohler (ATS)
RXT-JFNC-0100ASE
RXT-JFNC-0150ASE
RXT-JFNC-0200ASE
RXT-JFNC-0300ASE
RDT-CFNC-0200ASE
RDT-CFNC-0200BSE

**ESE Chapter 3: Equipment Listing Changes**

E303-E306: Now list Eaton and Erickson equipment separately per request from Erickson