

Summary of Major Changes:

- Chapter 1, section 109, increases the ability for a customer to have a second service.
- Chapter 1, section 109C, Detailed explanation of Fire Pumps.
- Chapter 1, section 110, Allows customer to use smaller Transformer.
- Chapter 12, section 1202, Allows customer to choose if transfer switch is needed.

Background:

- The Electric Service Rule Team conducts an annual review of the ESR.
- Company employees submit change requests to improve Electrical Services. There were some revisions based on this feedback.

Rule Number	Page	Rule Name	More Info about Edits
105.C	1-2	Continuity of Service	A. Updated language – “the service installation shall be approved by Electric Metering and Alliant Energy Engineering. The customer shall (at customer’s expense) provide proof of inspection by a licensed electrician or a local licensed electrical inspector deeming the service safe. A wiring statement/affidavit shall be completed before service is energized.
107.F.2	1-3	Wiring Inspections	Removed “ For existing one and two family residential dwellings, affidavits may still be accepted”.
108.4	1-4	Superscripts	Removed “600 amps may be allowed with engineering approval in areas where access is designated as aerial lift access only. Limited by capacity of maximum of parallel 350 MCM AL risers, the ampacity is limited to 400 amps by the cable riser capacity where there is not aerial lift access.”
109.A.3	1-5	Backup Service	Updated language – Added “Primary and backup services may share common metering or be separate”
109.C.1.a	1-6	Distance Exceptions Buildings	Re-wrote first sentence - “For buildings that cannot be served by only one service, Alliant Energy may provide a second service at any available secondary voltage.” Removed– “The creation of a second building (by definition) with the construction of a three-hour firewall does not remove these distance requirements.” Added note – “ <i>t</i> An additional 277/480V service between 150-300’ may be allowed. (VARIANCE REQUIRED)”

Rule Number	Page	Rule Name	More Info about Edits
109.C.3	1-6	Electrically Isolated Service Exception	Added Verbiage “or remote structure” and (i.e. wiring)”
109.C.6.a	1-8	Fire Pumps	Added – “ Fire Pumps The utility transformer, utility service conductors and customer service equipment will be sized to serve full locked rotor current from the fire pump and accessory equipment, whether served from a dedicated service or from the load side of the metering transformer cabinet. “
110.4	1-10	Short Circuit Duty Requirements	Added language – “ ArcFlash Current – The Available Fault Current for the Present System. The "Present System" values are for the existing system as of the date of the request. The values may change at any time without notice due to system changes. Sizing Entrance Equipment for interrupting capacity shall be done using the tables provided below”
110.C	1-12	General Information	Re-wrote sentence – “ Available Fault Current for ArcFlash Studies ”
116.C	1-14	Capacity	Re-wrote paragraph – Removed “The <i>NEC</i> Article 220 load calculations shall be provided in writing to Alliant Energy.” Removed – 1) If an Article 220 load calculation is not available, The 80% amperage rating of an enclosure with two to six switches combined would be an indication of the potential maximum load. That load shall not exceed the ampacity rating of the termination box or metering transformer cabinet
116.E	1-14	Capacity	Re-wrote paragraph “Self-contained metering is limited to 300 amps commercial (two 150A or a 300A breaker) and 400 amps residential (two 200A or a 400A breaker).” Removed – “The combined service or overcurrent protection rating shall not exceed the ampacity rating of the self-contained meter socket.”
301.E	3-1	Attachment of Service Drops	Removed note - E “A maximum of three conduit risers will be allowed at the building or structure”
404.A.B and C	4-2 4-3	Underground Service Installations	Added Note - “*Expansion joints shall be above final grade”

Rule Number	Page	Rule Name	More Info about Edits
408A Drawing	4-8	Concrete Pad Specifications and Layout for Three-Phase, Pad-Mounted Transformers	Added Note – “Conduits shall not be concreted in. An open window shall be present.”
408B	4-9	Concrete Pad Specifications and Layout for Single-Phase, Pad-Mounted Transformers	Added - Concrete Pad specifications and layout for single-phase, pad-mount transformers. Added Note to drawing – “Conduits shall not be concreted in. An open window shall be present.”
410 Drawing	4-14	Concrete Pad Specifications and Layout for Joint Pad Three-Phase, Pad-Mount Transformer and Metering Transformer Cabinet	Added Note – “Conduits shall not be concreted in. An open window shall be present.”
502	5-1	Technical Information	Added another bullet - Electrical Service Equipment (ESE)
602 Drawing	6-2	Metering Installations	Added Fig. A through Fig. E
602.C	6-2	Metering Installations	“When mounting meter socket to side of CT cabinet self-taping screws will not be permitted, it shall be through bolted.”
605	6-3	Separation of Metered and Un-Metered Conductors	Added - “Line and load conductors shall not cross each other.”
611	6-13	277/480 Volt, Three-Phase, Up to 200AMPS-OH/UG-Self Contained-Limited to 10,000 AMPS Max Available Fault Current.	Added Note: #9 - “Preferred design is 602 Fig. D”
611A	6-14	277/480 Volt, Three-Phase, Up To 200 AMPS-OH-Self Contained-Limited to 10,000 AMPS Max Available Fault Current	New Drawing
611B	6-14	277/480 Volt, Three-Phase, Up To 200 AMPS-UG-Self Contained-Limited to 10,000 AMPS Max Available Fault Current	New Drawing
614E	6-29	Combined Self-Contained Group & Modular Metering and Metering Transformer Cabinet Installations.	Removed section 614E

Rule Number	Page	Rule Name	More Info about Edits
900	9-1	General	<p>Re-wrote 2nd Paragraph- " If the request for attachment is wire, fiber, wi-fi devices, distributed antenna systems, or small cells, the Attaching Entity must apply to attach and be approved to attach before any of these attachments are placed on Alliant Energy poles. Failure to get approval will result in immediate removal of the non-approved facilities. These requests are managed by the Alliant Energy Joint Facilities Dept. Please contact at jointfacilities@alliantenergy.com for further information visit the website, https://www.alliantenergy.com/PartneringwithAlliantEnergy/Pole</p>
900.A	9-1	General	<p>Re-wrote Paragraph A “Alliant Energy will not allow new meter sockets on poles. Metering facilities will not be allowed on Alliant Energy poles, except where entities have previously been allowed to attach metering facilities (due to prior rules that allowed this practice). Current rules do not allow metering facilities to be on a pole, and no new requests will be allowed. If there is a mitigating factor, please request a variance from the ESR Committee and the Joint Facilities department”</p>
900.B	9-1	General	<p>Re-wrote Paragraph B “Poles with transformers, capacitor bank, risers, three-phase switches, three-phase buck arm corners or taps should be avoided if possible. If such poles are requested, then a review by Alliant Energy will be conducted to determine feasibility. Attachers that need power for their equipment (such as small cells, wifi, and antennas,) should work with Joint Facilities and determination what will be allowed (power equipment, metering, etc) and be made as part of that project. Under Joint Facilities, the attacher may be able to attach to poles (non-wood street light poles, ornamental lighting poles, capacitor bank poles, risers, three-phase switches, and three-phase corner pole or taps) as long as they are responsible for the costs to upgrade the pole, and there are no safety issues. The attachment request to those pole types will be reviewed and approved via a coordination between Facilities, Operations, and Standards.”</p>

Rule Number	Page	Rule Name	More Info about Edits
900.C	9-2	General	Paragraph B is now Paragraph C “When the customer’s equipment, risers and meter-sockets are allowed on Alliant Energy poles, they may not occupy more than two adjacent quadrants. Clearances shall be maintained as indicated in the NESC, <i>NEC</i> and any local or state codes.
907	9-12	Small Cell Equipment Installation	Added New drawing
1202.D	12-1	Transfer System Requirements	Re-wrote Paragraph “All transfer switch devices that meet UL 1008 Rated and designed with Break-Before-Make connections will not require a Standby Generation Disconnect.”
1202.E	12-1	Transfer System Requirements	Re-wrote Paragraph “Transfer Switches that do not meet UL 1008 shall have a lockable, visually-open break in the circuit that isolates the utility normal supply from the customer’s transfer switch. This break, referred to as the Standby Generation Disconnect, shall be accessible to Alliant Energy and should be located within 10’ of the meter, unless otherwise labeled. A circuit breaker may be considered if installed with a locking mechanism and approved by Alliant Energy distribution engineering and metering.”
1307.C	13-8	Special Horizontal Clearances for Overhead Cable Services	Removed – “WIS Only” Re-wrote language–“Minimum horizontal clearance between wells and overhead conductors shall be at least .75 of the required vertical clearance of the conductor ground. See NESC table 232.1 and WIS.PSC 114.234”