

Primary Metering Service

Scope

This chapter outlines the general requirements and service parameters for primary metering installations within Evergy's service territory. Primary metering is typically used for large customers requiring service at higher voltages and capacities. Primary metering installations must be coordinated with Evergy's Engineering, Standards, and Meter Operations departments. These services are subject to additional design review, equipment approval, and construction standards. Upon request, Evergy will specify the type of electric service and infrastructure available at a given location.

Customer One-Line

The customer shall provide a one-line diagram of their system. The diagram shall identify all switching devices downstream of the primary metering point and their functional capabilities. All those downstream switching devices shall provide a visible open indication and be capable of grounding. In addition, the customer shall provide lockout/tagout (LOTO) procedures for all applicable devices.

Primary Metering (Distribution)

The availability of Evergy's infrastructure at a given location determines the primary metering configurations that can be offered. Typical options include the following:

Primary Metered Service Voltages (Wye):2400/4160, 4800/8320, 7200/12470, 7620/13200, 7970/13860, 14400/24940, 19920/34500

Single circuit less than or equal to 600 Amps.

Service Configurations

Primary Metering Single Phase Overhead (PSPO)

This application applies to single-phase services requiring primary metering delivered via overhead infrastructure. Service is provided from Evergy's overhead distribution system at no more than 200 amps to the customer's infrastructure using either shielded or unshielded conductors, configured vertically on the pole.

Primary Metering Single Phase Underground (PSPU)

This application applies to single-phase services requiring primary metering delivered via underground infrastructure. Service is provided from Evergy's overhead or underground distribution system at no more than 200 amps to the customer's service equipment through underground conduit, either from a padmounted switchgear or from a pole-mounted riser.

Primary Metering Three Phase Overhead (PTPO)

This application applies to three-phase services requiring primary metering delivered via overhead infrastructure. Service is provided from Evergy's overhead distribution system at no more than 600 amps to the customer's service equipment using shielded or unshielded conductors, configured horizontally or vertically.

Primary Metering Three Phase Underground (PTPU)

This application applies to three-phase commercial or industrial services requiring primary metering delivered via underground infrastructure. Service is provided from Evergy's overhead or underground distribution system at no more than 600 amps to the customer's service equipment through underground conduit, either from a padmounted switchgear or from a pole-mounted riser.

Service Points

Primary Metering Single Phase Overhead (PSPO)

Service point occurs at the dead-end shoes on the company owned meter pole. Customer to provide an approved conductor to the service point. Company will install customer provided conductor on company owned pole.

Primary Metering Single Phase Underground (PSPU)

For padmounted installations, the service point occurs at the primary bushing interface on the load side the primary meter cabinet. The Company will provide the appropriate 200-amp IEEE Std 386 compliant bushing interface, selected based on the system voltage class and required ampacity. For 35kV insulations, the company uses the small interface. The Customer shall furnish Company-approved primary cable and terminations and is responsible for terminating the cable. The Company will install the terminated cable assembly onto the primary meter cabinet.

Primary Metering Three Phase Overhead (PTPO)

Service point occurs at the dead-end shoes on the company owned meter pole. Customer to provide an approved conductor to the service point. Company will install customer provided conductor on company owned pole.

Primary Metering Three Phase Underground (PTPU)

For padmounted installations, the service point occurs at the primary bushing interface on the load side the primary meter cabinet. The Company will provide the appropriate 600-amp or 200-amp IEEE Std 386 compliant bushing interface, selected based on the system voltage class and required ampacity. For 35kV insulations, the company uses the small interface. The Customer shall furnish Company-approved primary cable and terminations and is responsible for terminating the cable. The Company will install the terminated cable assembly onto the primary meter cabinet.

Primary Metering (Substation)

The availability of Evergy's infrastructure at a given location determines the primary metering configurations that can be offered. Typical options include the following:

Primary Metered Service Voltages (Wye): 2400/4160, 4800/8320, 7200/12470, 7620/13200, 7970/13860, 14400/24940, 19920/34500

Primary Metered Service Voltages (Delta): 34500, 69000, 115000, 138000, 230000, 345000

Single circuits greater than 600 Amps

Service Configurations

Primary Metering Overhead

This application applies to three-phase services requiring primary metering delivered via overhead infrastructure. Metering equipment is the substation served from an overhead line or bus.

Primary Metering Underground

This application applies to three-phase services requiring primary metering delivered via underground infrastructure. Metering Equipment is the substation served with an underground line.

Service Points

Primary Metering Overhead

Evergy to own OH line or Bus to first span outside substation including the structure. Customer purchases, owns and maintains lines and/or bus from the structure to their facilities.

Primary Metering Underground

The customer purchases, owns and maintains the lines into the substation from their facilities. This includes the installation of the cable (in coordination with Evergy) and termination of the cable at both ends. Installation will involve

Evergy personnel on the substation side of the underground circuit. Evergy to inspect terminations on the Evergy end, verify, and then land the cables on Evergy equipment.

Primary Metering (Transmission)

The availability of Evergy’s infrastructure at a given location determines the primary metering configurations that can be offered. Typical options include the following:

Primary Metered Service Voltages (Delta): 69000, 115000, 138000, 230000, 345000

Service Configurations

Primary Metering Overhead

This application applies to three-phase services requiring primary metering delivered via overhead infrastructure. Metering equipment is located on the transmission structure.

Service Points

Primary Metering Overhead

Metered at Agreed upon transmission location. Evergy to own OH line to meter structure and metering devices. Service point occurs at the dead-end shoes on the company owned meter pole. Customer to provide an approved conductor to the service point. Company will install customer provided conductor on company owned pole.

Introduction

Company reference

Evergy Kansas Central, Inc., Evergy Kansas Metro, Inc., Evergy Missouri Metro, Inc., and Evergy Missouri West, Inc. (collectively referred to in this document as “Evergy” or the “Company”) are the legal utility providers that serve the Evergy service territory. While these four entities operate under the shared corporate brand Evergy, “Evergy” itself is not a legal utility name.

For clarity and readability, this document primarily refers to the utility providers collectively as “Evergy” or the “Company.” However, because these four utilities maintain separate tariffs, rules, and regulatory obligations, certain requirements within this document may vary by service territory.

Document updates

These standards supersede all previous publications of the Electric Service Standards issued by the Company prior to this date. They are subject to change without notice due to ongoing advancements in materials, methods, and regulatory requirements.

Persons making use of this document are encouraged to maintain contact with the Company to ensure they are referencing the most current version, as some procedures outlined herein may be modified over time.

Company commitment

The Company is committed to helping its customers realize optimum value and utility from their electrical service. This commitment is guided by our company’s vision: to provide affordable, reliable, and sustainable energy that creates the foundation for thriving and growing communities.

To achieve this, the Company must effectively utilize its production and supply capabilities while ensuring safe, consistent, and dependable service across our service areas. Our daily focus remains on delivering power that is not only essential to everyday life but also foundational to economic development and community prosperity.

By partnering with customers, communities, policymakers, and regulators, we embrace our role in shaping the future of the regions we serve. This vision aligns our efforts and reinforces our responsibility to provide energy that supports growth, innovation, and sustainability—now and for years to come.

Intent of the standards

These standards are intended to communicate the Company’s specific requirements for electric service installations. They are provided to assist customers, architects, engineers, contractors, electricians, and inspectors in planning installations that align with the Company’s service capabilities and infrastructure. They are not intended to ensure adequacy and safety of the customer’s own wiring and equipment or for safety and reliability to serve when customer load substantially increases subsequent to service origination. Such responsibility remains with the customer. The Company does not inspect the customer’s wiring for compliance with requirements of electrical codes or regulations established by public bodies.

While compliance with the NEC, NESC, and applicable laws is required, it is important to understand that these codes represent minimum safety standards. As stated in the NEC: “This Code contains provisions considered necessary for safety. Compliance therewith and proper maintenance will result in an installation essentially free from hazard but not necessarily efficient, convenient, or adequate for good service or future expansion of electrical use.” Customers should plan installations with long-term usage, efficiency, and future expansion in mind, beyond the minimum code requirements.

When to contact the Company

Customers are strongly encouraged to contact the Company as early as possible when planning any new electrical installation, addition, or alteration. Alterations to existing facilities may require updates to meet current service standards. Early coordination allows sufficient time for job checking, scheduling, design, and proper alignment with service requirements.

When requesting new or modified electric service, customers must complete an [Application for Service](#). If requested by the Company, the customer shall provide sufficient information regarding the size and characteristics of the load, the location of the premises to be served, and any other details necessary for the Company to determine the appropriate

class of service and the conditions under which it will be supplied. A separate application is required for each class of electric service at each set of customer premises.

Prior to designing or purchasing equipment, customers should consult the Company regarding service characteristics such as current, voltage, point of delivery, and any necessary extensions to the electrical distribution system.

Inspection and Liability

The Company does not design, plan, install or maintain the customer’s wiring or electric equipment. The Company suggests electrical work be done by a licensed electrician. The company assumes no responsibility for work performed without proper legal authority.

New wiring and alterations in wiring in many municipalities are required by law to be approved by the local electrical inspector’s office prior to being connected by the Company. The Company shall not render service until the Company receives approval(s) from the appropriate authority having jurisdiction. If there is no governing body, the Company reserves the right to inspect and not connect service when deemed insufficient. Once verification that service is compliant has been received from local jurisdiction or Company representative, respectively, service can be connected.

The responsibility of the customer regarding use of electric service supplied by the Company is not set aside and the Company shall in no way be liable on account of any inspections or recommendations by the Company which are made as a courtesy to the customer or as a protection to the electric service supplied by the Company to its other customers. The Company reserves the right but assumes no duty to inspect the customer’s service installation.

Disclaimer

This document is intended for informational purposes only and does not constitute a warranty or guarantee of service adequacy.

Definitions

Authority Having Jurisdiction (AHJ) – The entity responsible for inspection and approval.

Alterations – Any modification, addition, or removal of electrical equipment, wiring, or infrastructure that affects the original installation. Alterations must comply with current NEC, NESC, and local jurisdictional codes as well as the most recent revisions of the Electric Service Standards.

Application for Service – A customer applying for electric service shall, if requested by the Company, furnish sufficient information on the size and characteristics of the load and the location of the premises to be served and such additional information as to enable the Company to designate the class or classes of electric service it will supply to the customer and the conditions under which they will be supplied. A separate application shall be made for each class of electric service to a customer at each premises of the customer.

Attached (as applied to Overhead Clearance) – The conductor or equipment is physically mounted to or supported by the bridge or its components (e.g., railings, walls, beams). Since it's fixed in place, the clearance requirements are generally lower, as the conductor's position is controlled and predictable.

Clear Working Space – A designated, unobstructed area around electrical equipment that remains free of stored materials, unrelated equipment, or other encroachments. This space allows qualified personnel to safely access, operate, inspect, maintain, and perform necessary tasks on the equipment without undue risk.

CMFO – Commercial Multi Family Overhead

CMFU – Commercial Multi Family Underground

CMOO – Commercial Multi Occupant Overhead

CMOU – Commercial Multi Occupant Underground

Commercial – Electric service provided to premises where the service is classified under a non-residential meter rate. It also refers to multi-family dwellings with more than four individual units or premises with more than four residential meter rates. Commercial service applies where the primary use of electricity does not meet the criteria for residential classification.

Commission(s) – The Missouri Public Service Commission for business in the state of Missouri and the Kansas Corporation Commission for business in the state of Kansas.

Communications – Cable TV, telephone, fiber, or similar communications business.

Company - Collective term for Evergy Missouri Metro, Evergy Missouri West, Evergy Kansas Metro, and Evergy Kansas Central. If not applicable to all territories in this document, the individual, applicable names will be used.

Company Representative – A person designated by the Company—typically through the local operations manager or other authorized leadership—to act on behalf of the Company in matters related to service installation, field coordination, inspection, and compliance with Company requirements. A Company Representative may include designers, field personnel, engineering staff, or other qualified employees assigned to support customer projects and ensure adherence to Company standards.

Company Selected Location – A location designated by the Company Representative that establishes where customer-owned service equipment must be installed relative to the Company’s existing or future electric facilities.

Conductor – A material used to carry electric current from one point to another within an electrical system. Depending on their application, conductors may be installed overhead, underground, or within enclosures and raceways.

Conductor CT Wiring – The low-voltage conductors that connect metering equipment to the instrument rated meter socket. CT wiring carries reduced, standardized current signals used for accurate measurement in instrument rated metering installations.

Conductor Drip Loop – A loop formed in overhead service conductors at the point of entry to a building to prevent water from entering the service raceway or enclosure. The lowest point of the loop should be below the service entrance to allow water to drip off.

Conductor Service – The conductor connecting the service drop or service lateral to the line side connection of the meter socket.

Conductor Service Drop Quad – An overhead service drop constructed using four conductors supplying service to the customer’s building or structure.

Conductor Service Drop Triplex – An overhead service drop constructed using three conductors supplying service to the customer’s building or structure.

Conductor Service Entrance – The customer-owned conductors that run from the load side connection of the meter socket to the first means of disconnect for a building or structure.

Conductor Service Lateral – The underground conductors that run from the utility distribution system to the first connection at the customer's premises.

Conduit – Conduit may be galvanized rigid steel or schedule 40 (or schedule 80) gray PVC, depending on its usage, in accordance with codes and standards.

CSOO – Commercial Single Occupant Overhead

CSOU – Commercial Single Occupant Underground

Customer – Any person applying for, receiving, using, or agreeing to take a class of electric service supplied by the Company under one rate schedule at a single point of delivery and for use within the premise either (a) occupied by such persons, or (b) as may, with the consent of the Company, be designated in the service application or by other means acceptable to the Company.

Customer (as applied to Requirements Table) – The customer is solely responsible for these items in the requirements table.

Disconnect – A mechanical device used to open an electrical circuit by disconnecting all conductors supplying a piece of equipment, an installation, or a premises. A disconnect provides a visible, reliable means of isolation for safety, maintenance, or emergency use.

Disconnect First Means (FMD) – The first disconnecting means after the meter socket that is capable of disconnecting all ungrounded service entrance conductors supplying a building or structure. This device serves as the service equipment for the premises. At this point, the grounded (neutral) conductor is bonded to the equipment grounding conductor and the enclosure, establishing the grounding reference for the building's electrical system.

Disconnect Generation – A lockable, disconnecting means installed to isolate customer-owned generation equipment – such as generators, engine-driven sets, or other onsite power sources – from the premises wiring and the utility supply. This device provides a safe means for maintenance, inspection, verification of isolation, and operational control of the generation system. The generation disconnect must be lockable, externally located, and readily accessible to the Company.

Disconnect Primary Service (PSD, optional) – An optional, customer-owned, service-rated disconnecting means installed ahead of a customer trough (pull section or wireway) on the service conductors. The PSD is typically unfused, consistent with Company preference; however, a fused device may be required when mandated by the Authority Having Jurisdiction (AHJ). When installed, the device functions as service equipment located ahead of the meter, and the neutral lug is bonded to the enclosure in accordance with applicable codes. The PSD may be provided at the customer's discretion to facilitate isolation, sequencing, or service layout requirements.

Disconnect Primary Service (PSD, required by NEC) – A customer-owned, service-rated disconnecting means required by the NEC when a service supplies more than six disconnecting means to a building or structure. This device acts as the single upstream service disconnect, supplying the grouped disconnects downstream. The neutral lug is bonded to the enclosure, as the PSD serves as the service equipment for the installation.

Disconnect Primary Service (PSD, required by Evergy) – A customer-owned, service-rated disconnecting means required by Evergy for all underground-fed residential services where a trough is installed ahead of metering or panelboard equipment. The PSD is installed ahead of the trough and functions as the service equipment for the residence. The neutral lug is bonded to the enclosure, as required for service equipment.

Disconnect Utility – A device or assembly installed to provide a means of completely disconnecting electrical service from the utility supply, typically located on the customer's premises and accessible to utility personnel for safety, emergency isolation, or maintenance purposes. In Evergy service territory, this refers specifically to the unfused disconnect installed ahead of the meter socket on 277/480V 4-wire and 480V 3-wire services. The Utility Disconnect must comply with applicable codes and Company standards.

Dwelling Mounted Through Roof Guyed – A service configuration in which the service mast is mounted to a dwelling, extends through the roof, and is supported by guy wires. Guying is required when the point of attachment is more than two feet above the roof line or structural loading exceeds the ability of the mast and building framing to safely support the service drop.

Dwelling Mounted Through Roof Unguyed – A service configuration where the service mast is mounted to a dwelling, extends through the roof, and is not supported by guy wires. Unguyed installations are permitted only when mast height, loading, and mechanical requirements meet utility and code limits for unsupported installations. Typically used for short mast extensions that maintain required clearances.

Dwelling Mounted Under Eave – A service configuration in which the service attachment point is located beneath the dwelling’s eave, rather than on a mast. The attachment bracket is secured directly to the structure under the eave where code clearances allow. This arrangement is used when adequate conductor clearance can be achieved without a roof-penetrating mast.

Dwelling Mounted From Padmount – A service configuration where the dwelling is served from an underground service lateral connected to padmounted equipment. All conductors between the equipment and the meter location are underground.

Dwelling Mounted From Pole – A service configuration in which the dwelling is served from an overhead source serving an underground service lateral from a riser on a pole.

Easement – A legally granted right allowing a utility to access, construct, operate, maintain, repair, or replace electric lines, equipment, or related facilities on a portion of a customer’s property – including Road Right-of-Ways. An Easement does not convey ownership of the land; it provides the utility with ongoing rights necessary to safely install and maintain utility infrastructure within the defined easement area.

Easement Line – The boundary that separates the area reserved for use by the easement holder from the portion of the property under the exclusive control of the customer. The Easement Line marks the limit of the utility’s granted rights within an easement – such as access, construction, operation, or maintenance – and identifies where those rights end and the customer’s undisturbed property begins.

Electric Service – The availability of electric power and energy supplied by the Company at a point of delivery within the Company’s service territory on or near the customer’s premises, at approximately the standard voltage and frequency for a class of service made available by the Company in that area, which source is adequate to meet the customer’s requirements as stated or implied in the customer’s service agreement, regardless of whether or not the customer makes use of such electric service.

Evergy Kansas Central (EKC) – An operating subsidiary of Evergy that provides electric service across a large portion of central and eastern Kansas, including major cities such as Topeka, Wichita, and Manhattan, along with many surrounding communities.

Evergy Kansas Metro (EKM) – An operating subsidiary of Evergy that provides electric service to the Kansas side of the Kansas City metropolitan area, including cities such as Overland Park, Olathe, Kansas City, KS, and surrounding suburban areas.

Evergy Missouri Metro (EMM) – An operating subsidiary of Evergy that provides electric service to the Missouri side of the Kansas City metropolitan area, including Kansas City, MO, and surrounding municipalities.

Evergy Missouri West (EMW) – An operating subsidiary of Evergy that provides electric service to communities in western and northwestern Missouri, outside the urban Kansas City metro area. This includes cities such as St. Joseph, Chillicothe, Clinton, and additional rural and regional communities.

Evergy (as applied to Requirements Table) – The company is solely responsible for these items in the requirements table.

External Metering – Metering equipment is installed outside the customer’s building, typically on a meter pedestal, pole, or exterior wall.

Ground Mounted From Padmount – A service configuration using a ground-mounted meter pedestal or service equipment, supplied by an underground service lateral from padmounted equipment.

Ground Mounted From Pole – A service configuration with a ground-mounted meter pedestal or service equipment that is supplied from pole-mounted overhead conductors.

Guy Wire – A tensioned cable designed to add stability to poles or other structures. Guy wires are used to counteract mechanical forces and must be installed with proper clearance.

Horizontal – Crossarm construction with all primary conductors on the same supporting arm with the pole located in the middle of the arm.

Inspection – The process of reviewing and verifying that electrical installations meet applicable codes, standards, and utility requirements. Inspections may be conducted by Evergy personnel or the authority having jurisdiction.

Installed by (as applied to Requirements Table) – Identifies the party responsible for physically installing the equipment or material as part of the initial service installation.

Instrument Rated – Equipment designed to operate in conjunction with instrument transformers that scale primary electrical quantities to lower, standardized levels suitable for accurate metering. Instrument-rated installations use devices that reduce primary current (commonly referred to as CT’s) or reduce primary voltage (commonly referred to as PTs) to

values appropriate for the meter, allowing measurement of electrical services that exceed the capacity of self-contained metering equipment. Instrument-rated systems are required where service voltages or currents are too large for the meter to be connected directly and therefore rely on these intermediary transformers to provide safe, accurate measurement.

Internal Metering – Metering equipment is installed inside the customer's building or facility for instances where external metering is not possible.

Introduction – A general overview section that outlines the purpose, scope, and applicability of the Electric Service Standards. It provides context for users and explains how to navigate the document.

Label Meter Socket - A label or placard that shall be permanently affixed to the meter socket and shall not be hand written. Required in multi-occupancy and multi-family buildings such as apartments. Each meter and service switch must be permanently marked for the unit it serves. Markings must be placed outside the meter enclosure on the lid. Inside each meter enclosure the correct apartment number shall be inscribed in permanent marker or paint at the back near the socket clips. The label shall be of sufficient durability to withstand the environment involved. The required information shall clearly display the address for which the meter socket provides service.

Label Utility Disconnect – A label or placard that shall be permanently affixed to the equipment and shall not be hand written. The label shall be of sufficient durability to withstand the environment involved. The required wording shall read: "UTILITY USE ONLY". Additionally, it must be labeled as "METER DISCONNECT, NOT SERVICE EQUIPMENT".

Liability – Refers to the responsibility for damages, injuries, or code violations resulting from improper installation, maintenance, or use of electrical systems. Evergy assumes no liability for customer-owned equipment beyond the point of service delivery.

Line (Supply) Side – The side of an electrical device or equipment that receives power from the source feeding that device. The term is referential, meaning the line side is always defined relative to the specific device being referenced.

Examples:

- Meter Socket: The line side is the set of conductors that supply power from the service drop or service lateral into the meter.
- First Means of Disconnect: The line side is the set of service entrance conductors that supply power from the meter into the service disconnect.

Load Side – The side of an electrical device or equipment that delivers power to downstream wiring, equipment, or customer loads. The term is referential, meaning the load side is always defined relative to the specific device being referenced.

Examples:

- Meter Socket: The load side is the set of conductors that deliver power from the meter to the first means of disconnect.
- First Means of Disconnect: The load side is the set of conductors and equipment downstream of the service disconnect, including panels, feeders, and branch circuits.

Local Jurisdiction – The city, county, or municipal authority responsible for inspecting and enforcing building and electrical codes. Installations must meet both Evergy standards and the requirements of the local jurisdiction.

Maintained by (as applied to Requirements Table) – Identifies the party responsible for performing ongoing labor associated with maintenance, repair, or replacement of the equipment or material after initial installation. This designation applies strictly to labor and does not imply ownership, furnishing of materials, or assignment of costs.

Maintenance Only – Non-standard, no approval for maintaining legacy structure, but approval required for new construction.

Meter Breaker Combo – A factory-assembled, single enclosure that combines two compartments – a self-contained meter socket and a main service disconnect or breaker. The unit provides a metering section with a lockable compartment for utility metering and a second compartment for a customer-accessible disconnect.

Meter Collar – Adapting device between the meter and meter socket allowing you to insert a branch circuit into an existing installation with minimal modification to existing meter socket installation.

Meter Socket – A metal enclosure which contains a socket for inserting a meter to measure consumption of electrical energy (also referred to as a cabinet, meter box, meter can, or meter enclosure).

Meter Socket Compartment – The portion of a meter socket or metering assembly that contains the meter mounting jaws, line and load terminals, and associated metering connections. This compartment is accessed through the meter opening or meter cover and is distinct from any adjacent compartments containing disconnects, breakers, or customer equipment in combination devices.

Meter Socket Hub – A connection at the top of a meter socket to create a rain tight connection. A piercing screw coupling is not acceptable.

Meter Pole – A customer-owned pressure treated (for ground contact) wood pole with metering equipment. Formerly known as a Farm Pole in legacy standards and tariffs.

Modular – Structures constructed off-site and delivered as one or more finished sections that are connected on-site. These units may be installed individually or stacked in multi-level arrangements – commonly three, four, or five modules high.

Multi Family – A single building or structure that contains two or more dwelling units or premises, each intended for occupancy and typically separately metered.

Multi Occupancy – A commercial or non-residential building or structure that contains two or more separate business, industrial, or organizational occupants, each operating as independent premises but sharing a common building or site infrastructure. Multi-occupancy spaces do not meet the definition of dwelling units, which require independent living facilities including permanent provisions for living, sleeping, cooking, and sanitation.

Multi Position – A configuration in which a service installation provides more than one metering or disconnecting position within a single, horizontally oriented assembly or enclosure. A Multi position installation is designed to serve multiple customer loads, units, or tenant spaces, with each position maintaining its own meter and/or disconnecting means.

NEC – National Electric Code NFPA 70.

NEMA – National Electrical Manufactures Association.

NESC – National Electrical Safety Code IEEE-C2.

Net Metering – Using a “single meter” to measure the consumption and generation of electricity by a small generation facility, such as a house with wind or solar photovoltaic generation. The “net” energy produced or consumed is purchased from or sold to the utility provider, respectively.

Not Attached (as applied to Overhead Clearance) – The conductor or equipment is not physically connected to the bridge – it may pass over, under, or beside the bridge but is supported by separate poles or structures. These situations require greater clearance to account for potential movement (sag, sway) and to ensure safety in case of conductor failure or maintenance access.

Padmount – A type of transformer or electrical equipment installed on a pad at ground level. Padmount equipment is typically used in underground distribution systems and must be installed with required clearances and access.

Parallel Generation – The operation of customer-owned generation equipment – such as solar photovoltaic systems, wind turbines, or combined heat and power (cogeneration) units – while interconnected with and capable of operating in parallel with the electric utility’s distribution system. Parallel generation may produce electricity alone or, in cogeneration applications, produce electricity along with another useful form of energy as a byproduct. All parallel generation facilities must meet the Company’s interconnection, safety, and operating requirements.

PFD – Public Facing Document

Pole Mounted – A service configuration in which the meter and service equipment are installed on a customer-owned pole. The service may be supplied from overhead or underground sources.

Policy – The overarching principles, regulatory alignment, and strategic intent that govern the application of the standards. It defines the scope of the standards, references applicable codes and laws (e.g., NEC, NESC, state regulations), and clarifies the Company’s authority and responsibilities. This section serves as the bridge between high-level regulatory frameworks and the enforceable technical requirements found in the Provisions.

Point of Attachment (Service Attachment) – The Company-approved mounting point on a customer’s building or structure used to support the service drop.

Primary Metering – Electric service provided at voltages greater than 600 volts, typically for specialized customer configurations or when the customer elects to own and maintain their own transformation and distribution equipment. Primary metering is required when a customer requests service above 600 volts, or when the proposed electrical setup does not comply with applicable codes and necessitates a company-mandated metering arrangement. Evergy offers service at standard wye phase configurations, with 7200/12470 volts being the most commonly available. The availability of voltage configurations is subject to system limitations and may vary by location.

Proctor – A test control specification devised to evaluate compaction of cohesive soils. In this standard the maximum density for cohesive compacted materials shall be determined in accordance with ASTM D698 (Standard Proctor Test). ASTM D698 shall apply to compaction of disturbed soil under pads for equipment, backfill of trenches for underground electric lines and any other similar application.

Provided by (as applied to Requirements Table) – Indicates the party responsible for supplying the equipment or material for new construction and maintenance of existing.

Provisions – The enforceable, technical, and operational requirements that customers, electricians, and designers must follow when connecting to or modifying electric service. These include specifications for service types, metering, installation practices, equipment standards, and customer responsibilities. This section is the most detailed and prescriptive, forming the core of the standards practical application.

Quadplex – A type of conductor assembly consisting of four conductors.

Residential – Residential Electric Service refers to electric service provided to no more than four individual single-family dwelling units provided the service is metered under a residential rate as defined by the local commission. Any premises exceeding four residential meter rates or classified under a non-residential rate schedule shall not be considered residential.

Right-of-Way – Publicly owned, controlled by a governmental body, or otherwise reserved corridor of land intended for transportation, utility infrastructure, or similar public-use purposes. A Right-of-Way provides the controlling entity the authority to install, access, and maintain facilities such as electric lines, roadways, pipelines, or communications infrastructure within its boundaries.

RMFO – Residential Multi Family Overhead

RMFU – Residential Multi Family Underground

RSFO – Residential Single Family Overhead

RSFU – Residential Single Family Underground

Rural Customer (as applied to Power Quality Standards) – A customer taking electric service (except electric service used in connection with a commercial enterprise not related to residential or farming purposes) who uses such electric service for residential purposes in a district which has not been platted and recorded, or in connection with the carrying on of farming or other agricultural pursuits. The Company reserves the right in all instances to designate whether a customer is or is not a rural customer.

Self-Contained Meter Socket – A meter socket designed for direct connection of the meter to the service conductors without the use of instrument transformers. In this configuration, the full service current and voltage pass through the meter.

Service Point (Point of Delivery) – The location at which Evergy’s service conductors or equipment end and the customer’s wiring or equipment begins. This is the official point where ownership, operational responsibility, and maintenance responsibility transfer from Evergy to the customer. The Service Point also establishes the location at which service voltage and power quality are evaluated.

Shielded – Construction with a conductor in the highest position on the pole to give the phase wires protection from lighting strikes.

Single Can – A single, individual metering enclosure (meter “can”) used to house one self-contained meter socket. A Single Can is intended to serve one customer load and includes no provisions for multiple metering positions.

Single Family – A residential dwelling unit designed to house one family or household and served by a single electrical service point and meter unless otherwise permitted by code. Single Family installations typically use one service drop or lateral, one meter socket, and one set of customer-owned equipment for the premises.

Single Occupancy – A building or structure used or intended for use by one occupant, entity, or tenant. Single Occupancy applies to commercial structures and indicates that only one customer load or tenant space requires service. Single Occupancy buildings typically utilize a single service disconnecting means and a single meter unless a non-standard configuration has been approved.

Single Phase – An electrical service configuration using one alternating current (AC) waveform at 60 hertz. Commonly used for residential and light commercial applications. Typically includes two hot wires and one neutral.

Single Position – A configuration in which a service installation provides only one metering or disconnecting position. A Single Position installation serves one customer load and is not designed to accommodate multiple meters, tenants, or disconnects.

Special Design – Requires approval and guidance from a Standards Representative.

Standard Design – Current standard preferred construction, no supplemental approval is required.

Standards Representative – A person designated by the Company with responsibility for the development, maintenance, interpretation, and application of Company standards. A Standards Representative provides authoritative guidance on technical requirements, evaluates specialty, unique, or non-standard installations, and issues approvals or exceptions as defined within applicable standards. This role operates within Standards Engineering and serves as a specialized

technical authority beyond the scope of a Company Representative, ensuring consistency, safety, compliance, and alignment with Company policies, codes, and industry best practices.

Temporary – Electric service provided as a non-permanent installation intended to provide short-term electric power prior to permanent service.

Three Phase – An electrical service configuration using three alternating current (AC) waveforms at 60 hertz, offset by 120 degrees. Used for larger commercial and industrial loads.

Top of Finished Grade – The final surface elevation of the ground or landscape after all construction, grading, and expected soil settling are complete. The Top of Finished Grade represents the highest point of the finished terrain.

Transformer – An electrical device used to change voltage levels between circuits. Transformers are used to step voltage up or down.

Triplex – A type of conductor assembly consisting of three conductors.

Trough – A customer-owned wireway/pull section used to route and split service conductors to multiple disconnects or meter sockets.

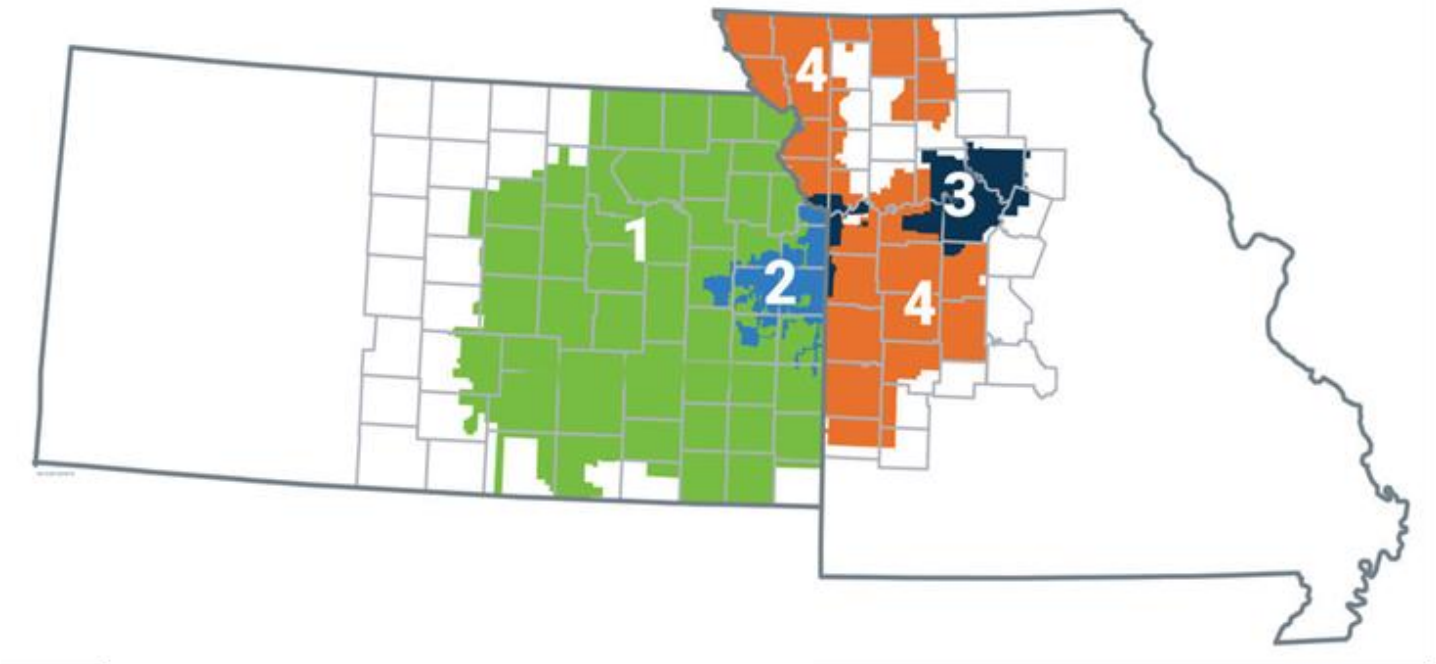
Unrestricted Access – Continuous, unobstructed access from the public right-of-way to Company equipment that allows immediate, 24/7 entry without reliance on third parties. Access shall not require background checks, security escorts, or coordination with building, tenant, or security personnel.

Unshielded– Construction where the phase is attached above the neutral.

U.L. – Underwriters Laboratory.

Vertical – Armless construction with each phase located in a different plane.

Service Territory



Evergy name
1. EVERGY KANSAS CENTRAL
2. EVERGY KANSAS METRO
3. EVERGY MISSOURI METRO
4. EVERGY MISSOURI WEST

Policy

Purpose of the Standards

Experience has shown that uniform standards for installation, wiring, and system design are the best way to accomplish our common goals. These Standards and requirements are intended to assist in expediting service connections. This Standard is issued by the Company as a guide for obtaining electric service and to set forth the services available, conditions for service, and the standards for materials and construction in the customer's entrance installation. It is not the intent or responsibility of this document to design, specify, or otherwise dictate the configuration of the customer's wiring or equipment.

Scope and Authority

The standards for materials and construction are necessary to secure maximum use of the Company's service and are the minimum under which the Company will supply service. Nothing contained in the Standards shall require the Company to install new facilities underground or require existing facilities to be put underground.

These standards are supplementary to, and not intended to conflict with, the General Rules and Regulations on file with the public utility regulatory commissions of Missouri and Kansas, the National Electrical Code (NEC), the National Electrical Safety Code (NESC), manufacturing codes, and applicable state, county, and municipal laws and ordinances. These governing codes establish the minimum legal and safety requirements for electrical installations within the Company's service territories.

Customer Support and Company Resources

The Company has representatives whose services are available to customers largely without charge. The Company will consider requests for further information or to investigate difficulties arising from utilization. Customers should call upon the Company any time they believe the Company's knowledge and experience may be of assistance.

Provisions

Service Characteristics

See appropriate section for service characteristics depending on service type. Refer to the [Service Type Decision Tree \(8000.0-005\)](#) to determine which service type applies.

General Compliance and Access

The customer shall give duly authorized agents and employees of the Company, when properly identified, full and free access to the premises at all hours. Each Company employee whose duty requires access to premises of the customer is furnished with a card bearing photo identification. The customer should deny admittance to anyone claiming to be an employee who refuses to display a properly approved identification card. Any uncertainty of identity or purpose or any unreasonable number of calls should be reported to the Company immediately.

Employees of the Company may neither demand nor accept any compensation from a customer for service rendered in the line of duty. However, certain employees do collect money from customers for settlement of accounts due to the Company, of which the customer is already aware.

Service Use and Restrictions

The customer is responsible for exercising reasonable care to avoid damage to Company-owned equipment located on their premises. Only Company employees, authorized agents, or individuals permitted by law may inspect, access, or handle this equipment. The customer is not expected to intervene in cases of theft, vandalism, or other criminal activity, but should promptly report such incidents to the Company and, where appropriate, to law enforcement. If Company property is damaged due to the actions or negligence of the customer or others under their control, the customer may be held responsible for the cost of repair or replacement.

Electric service supplied by the Company is for the exclusive use of the customer on the premises to which such service is delivered. The Company will not supply electric service to a retail customer for resale by the customer. This is only allowed when it is directed by the appropriate State Commission.

Attachments of any kind or nature shall not be permitted on Company poles without previous execution of the Company's License for Pole Attachments. To find standards for electric equipment attachments please see the Electric Equipment Joint Use Standards.

Parallel and Backup Generation Requirements

The Customer shall not operate or connect any other source of electric power—including but not limited to standby generators, renewable energy systems (e.g., solar, wind, battery storage), or any other form of distributed generation—in parallel with, or interconnected to, the Company's electric service without the prior written consent of the Company. This includes any equipment capable of generating, storing, or supplying electricity that is directly or indirectly tied to the Customer's electrical system while receiving service from the Company.

Unauthorized interconnection or operation of such equipment may result in immediate disconnection of electric service and other enforcement actions as permitted by law and Company policy.

Customer Responsibilities

The customer is solely responsible for obtaining all necessary rights, permits, and easements for any work performed on their property or others' property.

The customer is responsible for locating the service entrance equipment and meter socket at a place as designated by the Electric Service Standards and the company. Failure to do so may result in costs to the customer for service relocations and possible delay in providing service.

The customer is responsible for all wiring, equipment, appliances, and related apparatus located on the customer's side of the point of delivery. This includes the installation, maintenance, and condition of all customer-owned electrical facilities used to receive and utilize electric service. Residential installations typically terminate on the load side of the Company's meter. The Company does not assume responsibility for the design, installation, testing, or inspection of customer wiring or equipment.

Except as allowed by law, regulation, or order, in multiple-occupancy buildings, each of the premises shall be individually metered, as well as the common use facilities used in common if applicable. In multiple-occupancy buildings, each service shall have a label meter socket. The Company may inspect multi-metered units to verify accurate identification, and the responsible party must be present during this inspection. Any mismarked switches, breakers, or enclosures must be corrected, and it is the responsibility of the building owner, customer, or agent to ensure each breaker panel connects to the correct meter. The Company will not render service until all components are properly marked, and each apartment unit doorway must be clearly identified to allow verification of correct connections.

Customer Vegetation Management Responsibilities

Customers are responsible for maintaining vegetation around service lines located on their property. If tree trimming work needs to be performed near these lines, the Company will temporarily disconnect the service line to allow you or your contractor to complete the work safely. Once the trimming is complete, the Company will return to reattach the line.

To schedule a temporary disconnection, please call 1-888-471-5275. This service is provided at no charge.

Tree trimming at a distance greater than 10 feet from the line may be performed without disconnecting the line, provided that individuals, their tools, and equipment maintain a minimum clearance of 10 feet from the energized line at all times.

To prevent future hazards and service interruptions, it is strongly recommended that customers avoid planting tree species capable of growing to heights equal to or greater than the height of nearby overhead lines. Typical residential service lines are installed at heights ranging from 18 to 22 feet, depending on location and construction type.

Service Limitations and Multiple Services

Per NEC Article 230, a building or structure shall be supplied by only one service, unless permitted under NEC 230.2(A) through (D). Additional services may be allowed for:

- Fire Pumps
- Emergency Systems
- Legally Required Standby Systems
- Optional Standby Systems
- Parallel Power Production Systems

If the service size exceeds the size and number of sets, per the NEC requirements, that Evergy can provide with a service, additional services may be allowed as permitted by NEC Article 230.2(C), subject to Company design review and approval.

Installation and Construction

All construction-related charges, service request procedures, and installation requirements—including those involving excavation, underground service, and cost responsibilities—are governed by the Company’s Rules and Regulations applicable to each service territory. Customers should refer to the appropriate document for detailed terms, conditions, and potential charges.

For more information please consult:

- [Evergy Kansas Central Line Extension Policy](#)
- [Evergy Kansas Metro Line Extension Policy](#)
- [Evergy Missouri Metro Line Extension Policy](#)
- [Evergy Missouri West Line Extension Policy](#)

Drawing Depictions

Illustrations within these Standards may depict specific manufacturers’ equipment, such as Milbank or Siemens, for the purpose of showing typical installation configurations. These depictions are provided for example only and do not constitute an endorsement or requirement to use any particular brand.

Customers, electricians, and contractors may use any equipment or materials that meet applicable codes, meet the technical requirements of these Standards, and are listed on the Company’s approved materials list.

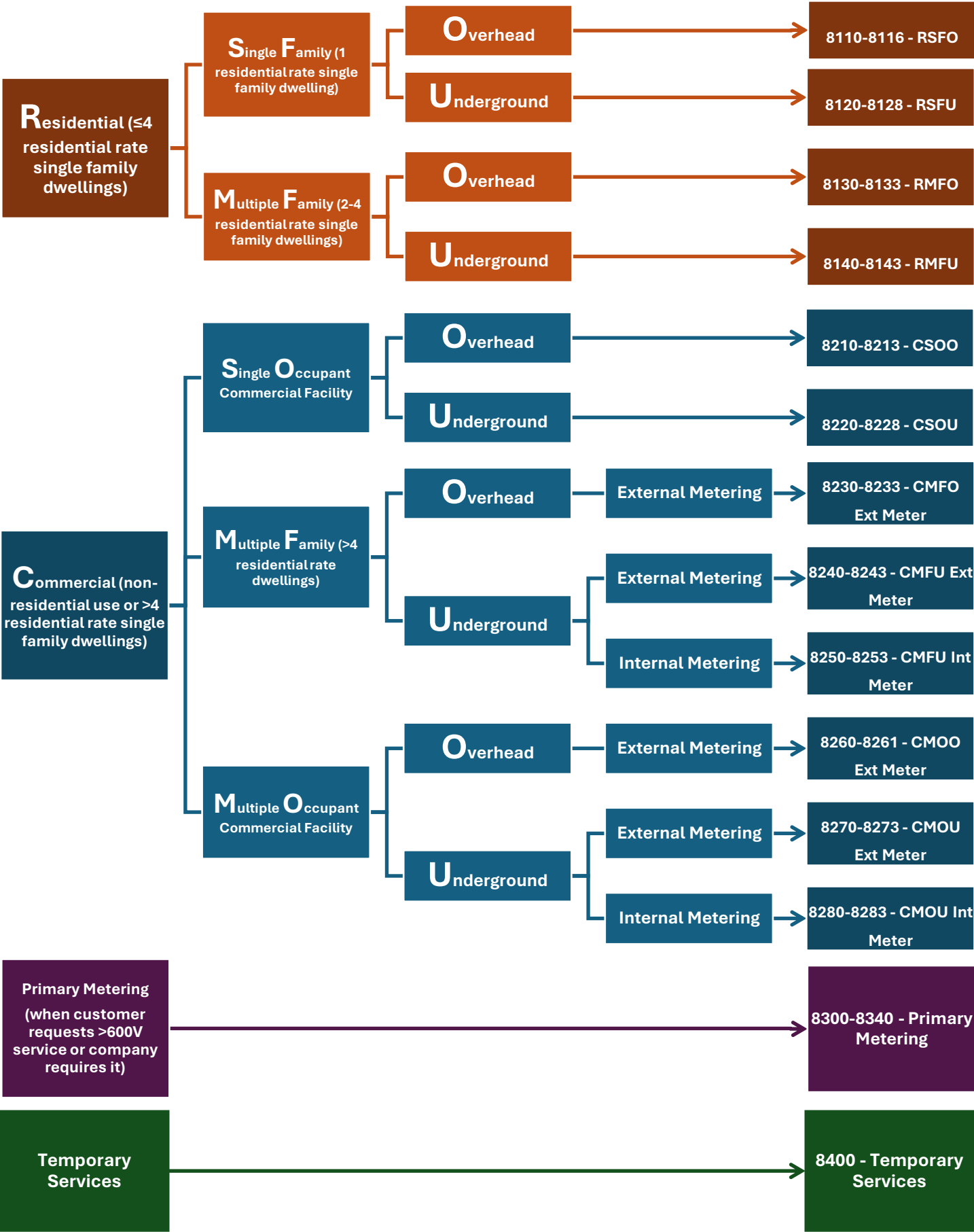
Conductor Representation

Some drawings may show additional lines on conductors as a result of the modeling software. These lines are not intended to indicate conductor type or function. For accurate conductor designations and requirements, refer to the corresponding Materials Table.

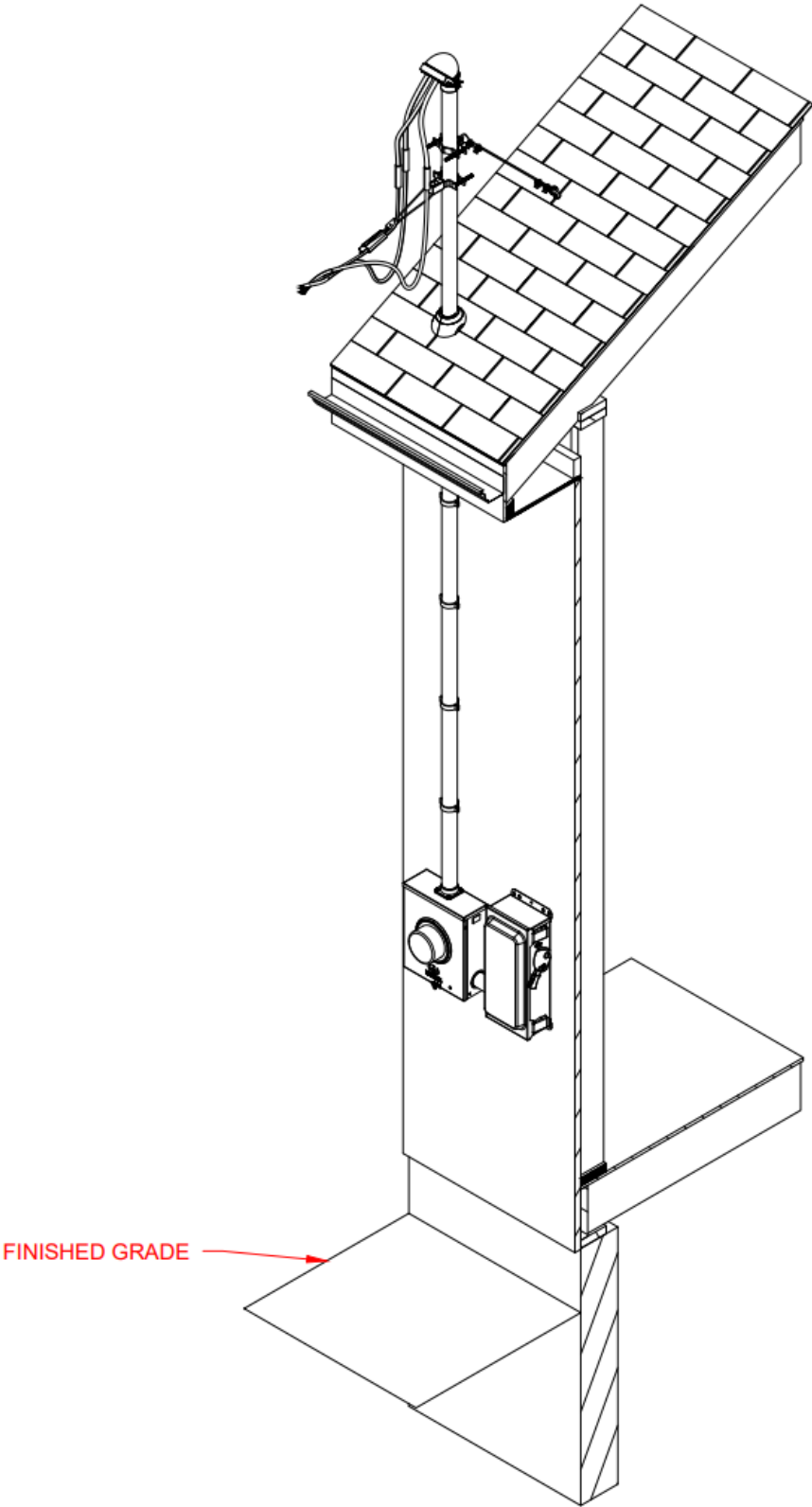
Rates and Billing

The rates for electric service rendered by the Company are on file with the Missouri Public Service Commission and the Kansas Corporation Commission. The rate schedules of the Company currently in effect and on file with the commissions will be made available by the Company for inspection by any customer during working hours at any of the Company's regular business offices. Upon request, representatives of the Company will explain rate schedules and assist in selection of the applicable rate best suited to the customer's requirements. The customer will be responsible for the final selection of the applicable rate schedule.

Service Type Decision Tree



Packets are provided for the customer's reference. When contacting the company, please refer to the standard number located in the bottom right corner and date drawn in the bottom left of the document to ensure accurate communication.



	EVERGY SERVICE STANDARDS	DRAWN DATE	RSFO DWELLING MOUNTED THROUGH ROOF GUYED SINGLE CAN, SINGLE POSITION 3W 120/240, 200 AMP	8111.10-032 Sheet 1 of 5
		10/07/2025		

	EVERGY SERVICE STANDARDS	DRAWN DATE	ESS GENERAL GENERAL SERVICE TYPE DECISION TREE	8000.0-005 Sheet 2 of 10
		4/30/2026		

Service Type Decision Tree Definitions

Residential – Residential Electric Service refers to electric service provided to no more than four individual single-family dwelling units provided the service is metered under a residential rate as defined by the local commission. Any premises exceeding four residential meter rates or classified under a non-residential rate schedule shall not be considered residential.

Commercial – Commercial Electric Service refers to electric service provided to premises where the service is classified under a non-residential meter rate. It also refers to multi-family dwellings with more than four individual units or premises with more than four residential meter rates. Commercial service applies where the primary use of electricity does not meet the criteria for residential classification.

Primary Metering – Primary Electric Service refers to electric service provided at voltages greater than 600 volts, typically for specialized customer configurations or when the customer elects to own and maintain their own transformation and distribution equipment. Primary metering is required when a customer requests service above 600 volts, or when the proposed electrical setup does not comply with applicable codes and necessitates a company-mandated metering arrangement. Evergy offers service at standard wye phase configurations, with 7200/12470 volts being the most commonly available. The availability of voltage configurations is subject to system limitations and may vary by location.

Temporary – Temporary Electric Service refers to electric service provided as a non-permanent installation intended to provide short-term electric power prior to permanent service.

Residential Service

Available services:

Voltage ₁	Wire Count	Status	Overhead or Underground	Utility Disconnect Required
120/240	3	Standard Design	Both	No
120/208	3	Standard Design ₂	Both	No

1. Service voltage values in this table are expressed as phase-to-ground followed by phase-to-phase (e.g., 120/240)
2. Company Representative will confirm availability at a given location.

Residential Single Family

- A structure built for single-family occupancy.
- Served through **one meter** at a residential meter rate.

Residential Single Family Overhead (RSFO)

This application applies to single-family residential dwellings requesting overhead electric service.

Service is provided from Evergy's overhead distribution system to the customer's service equipment.

Meter Mounting Options (depending on site conditions and service layout):

- Mounted to the dwelling through the roof, with either guyed or unguyed support
- Mounted to the dwelling under the eave
- Mounted to a customer-owned pole
- Ground-mounted from an overhead pole

Residential Single Family Underground (RSFU)

This application applies to single-family residential dwellings requesting underground electric service

Service is provided from Evergy's overhead or underground distribution system to the customer's service equipment through underground conduit.

Meter Mounting Options (depending on site conditions and service layout):

- Mounted to the dwelling, served either from an overhead pole or an underground pad-mounted transformer
- Mounted to a customer-owned pole
- Ground-mounted, served either from an overhead pole or an underground pad-mounted transformer.

Residential Multi Family (≤4 Units)

- A standalone or firewall-separated structure with **2–4 single-family units** served with residential meter rates, each with separate facilities.
- Electric service is provided from one service meter per unit.

Residential Multi Family Overhead (RMFO)

This application applies to multi-family residential dwellings with up to four separate meters (including but not limited to duplexes, triplexes, quadplexes) requesting overhead electric service.

Service is provided from Evergy's overhead distribution system to the customers' service equipment.

Meter Mounting Options (depending on site conditions and service layout):

- Mounted to the dwelling through the roof, with either guyed or unguyed support
- Mounted to the dwelling under the eave

Residential Multi Family Underground (RMFU)



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SERVICE
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SERVICE TYPE DECISION TREE

8000.0-005
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This application applies to multi-family residential dwellings with up to four separate meters (including but not limited to duplexes, triplexes, quadplexes) requesting underground electric service.

Service is provided from Evergy's overhead or underground distribution system to the customer's service equipment through underground conduit.

Meter Mounting Options (depending on site conditions and service layout):

- Mounted to the dwelling, served either from an overhead pole or an underground pad-mounted transformer

Commercial Service

Available services:

Voltage ₁	Wire Count	Status	Overhead or Underground	Utility Disconnect Required
120/208	3	Standard Design	Both	No
120/240	3	Standard Design	Both	No
240/480	3	Maintenance Only	Both	Yes
240	3	Maintenance Only	OH	No
480	3	Special Design	OH	Yes
120/208	4	Standard Design	Both	No
120/240 ₂	4	Maintenance Only	OH	No
277/480	4	Standard Design	Both	Yes

1. Service voltage values in this table are expressed as phase-to-ground followed by phase-to-phase (e.g., 120/240)
2. The 120/240, 4-wire service includes a high-leg (wild-leg) conductor with a nominal 208 V phase-to-ground voltage.

Commercial Use

- Structure receiving service under a commercial or non-residential rate, or
- A structure with five or more residential meter rates.
- Including but not limited to:
 - Retail and wholesale businesses
 - Professional services
 - Lodging (hotels, motels, apartments)
 - Clubs, office buildings, warehouses
 - Public buildings, schools, hospitals
 - Institutions, military posts, houses of worship
 - Manufacturing processes

Commercial Single Occupant

- A permanent structure enclosed by exterior walls, built for single occupancy.
- Served through **one meter** at a commercial meter rate.

Commercial Single Occupant Overhead (CSOO)

This application applies to commercial single occupant buildings requiring overhead electric service.

Service is provided from Evergy's overhead distribution system to the customer's service equipment depending on building load and transformer configuration.

Meter Mounting Options (depending on site conditions and service layout):

- Mounted to the dwelling through the roof, with either guyed or unguyed support
- Mounted to the dwelling under the eave

Commercial Single Occupant Underground (CSOU)

This application applies to commercial single occupant buildings requiring underground electric service.

Service is provided from Evergy's overhead or underground distribution system to the customer's service equipment through underground conduit depending on building load and transformer configuration.

Meter Mounting Options (depending on site conditions and service layout):

- Mounted to the dwelling, served either from an overhead pole or an underground pad-mounted transformer
- Ground-mounted, served either from an overhead pole or an underground pad-mounted transformer.

Commercial Multi Family (>4 Units)

- More than 4 dwelling units served through one or multiple meters at a residential rate.
- Not considered residential, even if the electric service is domestic in nature.
- Metering: May be internal or external
 - Internal Metering: Metering equipment is installed **inside** the customer's building or facility for instances where external metering is not possible
 - Internal metering is allowed under certain circumstances and has specific requirements. More information can be found in the Metering Requirements section.
 - External Metering: Metering equipment is installed **outside** the customer's building, typically on a meter pedestal, pole, or exterior wall.

Commercial Multi Family Overhead – External Metering (CMFO – Ext Meter)

This application applies to commercial multifamily buildings (more than four residential meters) requiring overhead electric service with external metering.

Service is provided from Evergy's overhead distribution system to the customers' service equipment depending on building load and transformer configuration.

Mounting Types:

- Dwelling Mounted – Through Roof (Guyed or Unguyed)
- Dwelling Mounted – Under Eave

Commercial Multi Family Underground – External Metering (CMFU – Ext Meter)

This application applies to commercial multifamily buildings (more than four residential meters) requiring underground electric service with external metering.

Service is provided from Evergy's overhead or underground distribution system to the customers' service equipment through underground conduit depending on building load and transformer configuration.

Mounting Types:

- Dwelling Mounted – From Pole
- Dwelling Mounted – From Padmount

Commercial Multi Family Underground – Internal Metering (CMFU – Int Meter)

This application applies to commercial multifamily buildings (more than four residential meters) requiring underground electric service with internal metering.

Service is provided from Evergy's overhead or underground distribution system to the customers' service equipment through underground conduit depending on building load and transformer configuration.

Mounting Types:

- Dwelling Mounted – From Padmount

Commercial Multi Occupant

- Includes multiple distinct businesses or tenants within a single building or complex (e.g., strip malls, office buildings, mixed-use commercial spaces).
- Each occupant may have separate metering, or a shared meter depending on lease agreements and service setup.
- Served at non-residential rates, regardless of the nature of the business (e.g., retail, office, restaurant).

- Not considered residential, even if some occupants perform domestic-type activities (e.g., daycare, assisted living).
- Metering: May be internal or external
 - Internal Metering: Metering equipment is installed **inside** the customer's building or facility for instances where external metering is not possible
 - Internal metering is allowed under certain circumstances and has specific requirements. More information can be found in the Metering Requirements section.
 - External Metering: Metering equipment is installed **outside** the customer's building, typically on a meter pedestal, pole, or exterior wall.

Commercial Multi-Occupant Overhead – External Metering (CMOO – Ext Meter)

This application applies to commercial multiple occupant buildings requiring overhead electric service with external metering.

Service is provided from Evergy's overhead distribution system to the customers' service equipment depending on building load and transformer configuration.

Mounting Types:

- Dwelling Mounted – Through Roof – Guyed

Commercial Multi-Occupant Underground – External Metering (CMOU – Ext Meter)

This application applies to commercial multiple occupant buildings requiring underground electric service with external metering.

Service is provided from Evergy's overhead or underground distribution system to the customers' service equipment through underground conduit depending on building load and transformer configuration.

Mounting Types:

- Dwelling Mounted – From Pole
- Dwelling Mounted – From Padmount

Commercial Multi-Occupant Underground – Internal Metering (CMOU – Int Meter)

This application applies to commercial multiple occupant buildings requiring underground electric service with internal metering.

Service is provided from Evergy's overhead or underground distribution system to the customers' service equipment through underground conduit depending on building load and transformer configuration.

Mounting Types:

- Dwelling Mounted – From Padmount

Primary Electric Service

- Minimum and maximum will depend on the capacity available at that location.
 - Under no circumstances should the minimum drop below 5 amps.

Primary Metering (Distribution)

- Applies when electric service is delivered at primary voltage levels, typically exceeding 600 volts and less than or equal to 34.5 kV phase to phase with ampacity less than or equal to 600 amps.
- Required when the customer's load is medium to high, the customer requests primary metering, high-impedance grounding systems are requested, or when the proposed service configuration does not comply with applicable codes and requires company-mandated metering.
- Used for large-scale facilities, campuses, or industrial operations where metering at the primary voltage is more practical or necessary.

Primary Metering Single Phase Overhead (PSPO)

This application applies to single-phase services requiring primary metering delivered via overhead infrastructure. Service is provided from Evergy's overhead distribution system at no more than 200 amps to the customer's infrastructure using either shielded or unshielded conductors, configured vertically on the pole.

Primary Metering Single Phase Underground (PSPU)

This application applies to single-phase services requiring primary metering delivered via underground infrastructure. Service is provided from Evergy's overhead or underground distribution system at no more than 200 amps to the customer's service equipment through underground conduit, either from a padmounted switchgear or from a pole-mounted riser.

Primary Metering Three Phase Overhead (PTPO)

This application applies to three-phase services requiring primary metering delivered via overhead infrastructure. Service is provided from Evergy's overhead distribution system at no more than 600 amps to the customer's service equipment using shielded or unshielded conductors, configured horizontally or vertically.

Primary Metering Three Phase Underground (PTPU)

This application applies to three-phase commercial or industrial services requiring primary metering delivered via underground infrastructure. Service is provided from Evergy's overhead or underground distribution system at no more than 600 amps to the customer's service equipment through underground conduit, either from a padmounted switchgear or from a pole-mounted riser.

Primary Metering (Substation)

- Applies when electric service is delivered at primary voltage levels from a substation, typically exceeding 600 volts and less than or equal to 345 kV phase to phase with ampacities greater than 600 Amps.

Primary Metering Overhead

This application applies to three-phase services requiring primary metering delivered via overhead infrastructure. Metering equipment is the substation served from an overhead line or bus.

Primary Metering Underground

This application applies to three-phase services requiring primary metering delivered via underground infrastructure. Metering Equipment is the substation served with an underground line.

Primary Metering (Transmission)

- Applies when electric service is delivered at primary voltage levels from a transmission line, typically exceeding 34.5 kV phase to phase and less than or equal to 345 kV phase to phase.

Primary Metering Overhead

This application applies to three-phase services requiring primary metering delivered via overhead infrastructure. Metering equipment is located on the transmission structure.

Temporary Service

Temporary service installations that provide short-term electrical power for construction, or other provisional needs prior to permanent service. Temporary service may be delivered via overhead or underground systems and can be either company-owned or customer-owned depending on the configuration on site as shown in the listed temporary services below. Temporary service is intended to be removed. See below for temporary services offered by the Company.

Temporary Service From Pole

Temporary Service From Pole – Customer Owned Service Equipment

This application applies to temporary service installations where the customer provides and installs the overhead service pole, meter base, and service riser in accordance with the Company’s specifications. The Company connects the overhead conductors and installs the meter after the approval and inspection from the authority having jurisdiction. The customer is responsible for maintaining all installed equipment.

Temporary Service From Padmount

Temporary Service From Single Phase Padmount – Company Owned Service Equipment

This application applies to temporary service installations where the Company provides service from an existing padmount transformer. The Company installs conductors to a company-owned meter pedestal or temporary panel. The customer must coordinate location, load requirements, and ensure site readiness. All installed equipment remains Evergy property.

Temporary Service From Single Phase Padmount – Customer Owned Service Equipment

This application applies to temporary service installations where the customer installs a meter pedestal or panel adjacent to an existing padmount transformer. Installation must follow the Company’s clearance and conductor specifications. The Company performs the final connection and installs the meter after inspection. The customer is responsible for maintaining all installed equipment.

Key Contacts

Evergy Kansas Metro, Evergy Missouri Metro, Evergy Missouri West Contacts:

- Customer care - 1-888-471-5275 from 7 am-5 pm on weekdays (except holidays)
- General Offices, Downtown Kansas City - (816) 556-2200
- For emergencies, power out or lines down, call toll-free – 1-888-544-4852 (1-888-LIGHT-KC)

Evergy Kansas Central Contacts:

- Residential 1-800-383-1183
- Business 1-800-401-5666

Utility One Call:

- Missouri – 1-800-344-7483 (1-800-DIG-RITE)
- Kansas – 811 or 1-800-344-7233 (1-800-DIG-SAFE)

Standards Representative:

- Email: servicestandards@evergy.com

System and Equipment Protection, Power Quality, and Power Factor Correction

Scope

This standard applies to all residential and commercial customers who install or operate equipment that may affect power quality or system stability. It covers:

- Motor installation and protection requirements
- Power factor correction equipment
- Harmonic mitigation and voltage fluctuation control
- Load balancing practices
- Filtering requirements for carrier frequency systems
- Lightning arrester installation guidelines

General Requirements

Customers shall ensure that all electrical equipment and systems are designed, installed, and operated in a manner that does not adversely affect the Company's electrical distribution system. Customers must notify the Company of any such equipment prior to installation or operation.

Power Quality and Harmonics

- Customers must comply with **IEEE 1453 Standards** for voltage flicker and harmonics.
- Equipment causing abnormal voltage fluctuations must be mitigated through appropriate design or filtering.
- Customers using building wiring for communication or signaling must install **electrical filtering equipment** to prevent carrier frequency currents from entering the Company's distribution system.

Motor Installation Requirements

Soft Start and Inrush Current

- Motors >10 HP must be equipped with soft start equipment to limit inrush current.
- Motors with ≤1 start per hour must not cause >2% voltage dip on the primary side of the service transformer.
- Motors exceeding these limits require written approval from the Company's Engineering Department.

Voltage-Specific Guidelines

- 120V Circuits: Motors up to 1 HP permitted if starting current <50A. Recommended maximum: ½ HP.
- 240V Single Phase:
 - Urban: Up to 10 HP
 - Rural: Up to 7.5 HP
 - Locked rotor current must not exceed 300A.
- Motors exceeding these power ratings may negatively impact the customer's service.

Approval Requirements

Written permission from the Company's Engineering Department is required for:

- Motors exceeding specified HP or BTUH ratings
- Motors with NEMA Code Letters indicating high locked rotor KVA
- Equipment with more than four starts per hour or unequal current draw

Urban Areas

Motor Rating	NEMA Code Letter
Single Phase: 10HP/50,000*BTUH or More	Any Code Letter
Three Phase: 20HP/225,000*BTUH or More 20 HP 25HP 30HP 40HP 50HP 60HP 75HP Over 75HP	Any Code Letter T or Greater R or Greater P or Greater L or Greater J or Greater H or Greater F or Greater Any Code Letter

*BTUH – British Thermal Units Per Hour

Rural Areas & Small Towns in Rural Areas

Motor Rating	NEMA Code Letter
Single Phase: 7.5HP/50,000*BTUH or More	Any Code Letter
Three Phase: 10HP/50,000*BTUH or More	Any Code Letter

*BTUH – British Thermal Units Per Hour

NEMA Code Letter Preference	
NEMA Code Letter	Locked Rotor KVA/HP
A	0.00 – 3.14
B	3.15 – 3.54
C	3.55 – 3.99
D	4.00 – 4.49
E	4.50 – 4.99
F	5.00 – 5.59
G	5.60 – 6.29
H	6.30 – 7.09
J	7.10 – 7.99
K	8.00 – 8.99
L	9.00 – 9.99
M	10.0 – 11.1
N	11.2 – 12.4
P	12.5 – 13.9
R	14.0 – 15.9
S	16.0 – 17.9
T	18.0 – 19.9
U	20.0 – 22.3
V	22.4 & Above

*BTUH – British Thermal Units Per Hour

Notes:

- These values apply to combined light and power secondary systems. In case of either automatic or non-automatic equipment, not more than four starts per hour are expected with long periods of continuous operation at maximum load. This does not apply to domestic laundry equipment.
- Where equipment contains more than one motor and some motors are arranged for starting in sequence, the maximum total current should not exceed these values and the interval between steps should not be less than one-half second.
- Where design of equipment produces unequal currents caused by auxiliary motors, the maximum total current should not exceed these values.
- Air conditioning or heat pump equipment is rated in BTUH* in accordance with ARI standards and NEMA standards.

- 12,000 BTUH is equivalent to one ton of air conditioning.

Motor Protection

The customer is responsible for protecting all motors per **NEC** requirements:

- **Overload Protection:** All motors should have over-current and thermal protective devices on all phases.
- **Single-Phase Protection:** Three-phase motors should be protected against single-phase operation.
- **Reverse-Phase Protection:** Motors operating sensitive apparatus should include reverse-phase relays.

The Company is not liable for damage due to inadequate or malfunctioning protective devices.

Lightning Arresters

Customer-installed lightning arresters must:

- Be connected on the **load side** of main entrance fuses or circuit breakers, or
- Be of the **ground lead disconnecting type**.

Load Balancing

Customers must balance loads on three-wire and four-wire systems to:

- Improve voltage regulation
- Maximize service entrance equipment efficiency

Power Factor Correction

- Power factor correction equipment must not introduce harmonics or cause voltage fluctuations.
- Equipment must be installed with proper filtering and coordination to avoid resonance with the distribution system.

Fault Currents

Available fault currents will vary with each installation. Inquiry for a particular location should be directed to the appropriate service center.

Single Phase Transformer Size	200 or 400 Amp services at 120/240V
37.5 KVA and smaller	10,000 Amperes symmetrical
50 KVA and 75 KVA	20,000 Amperes symmetrical
100 KVA and larger	50,000 Amperes symmetrical

Electric Service Standards Revision Log

Scope

This document is intended to provide a high-level summary of revisions. Applicable standards should be reviewed by service type or application to ensure reference to the latest approved version.

Rev. 0 – 4/13/2026

Initial publication of the Electric Service Standards.



Rev. 1 – 5/18/2026

Summary	Revision	Revision Type
8000.0-001	ADDED DEFINITION FOR METER SOCKET COMPARTMENT AND SELF-CONTAINED METER SOCKET	TEXT DOCUMENT REVISION
8000.0-001	ADDED DEFINITION FOR UNRESTRICTED ACCESS	TEXT DOCUMENT REVISION
8000.0-004	UPDATED LINK URL	TEXT DOCUMENT REVISION
8000.0-004	UPDATED THE SERVICE TYPE DECISION TREE HYPERLINK TO A WORKING LINK.	TEXT DOCUMENT REVISION
8000.0-005	REVISED SERVICE CLASSIFICATION WORDING TO CLARIFY COMMERCIAL/NON-RESIDENTIAL RATE APPLICABILITY AND STRUCTURES WITH FIVE OR MORE RESIDENTIAL METERS	TEXT DOCUMENT REVISION
8000.0-005 and 8300.0-000	ADDED SUBSTATION AND TRANSMISSION PRIMARY METER REQUIREMENTS.	TEXT DOCUMENT REVISION
8000.0-400	CORRECTED INTRODUCTORY TEXT REQUIRING CONTRACTORS/CUSTOMERS TO BALANCE LOADS ON THREE-WIRE AND FOUR-WIRE SYSTEMS.	TEXT DOCUMENT REVISION
8005.57-001	REMOVED BLANK SPACE BY REDUCING IMAGE SIZE CAUSING IMAGE TO APPEAR ON NEXT PAGE	TEXT DOCUMENT REVISION
8010.0-000	REMOVED ALLOWANCE FOR INTERNAL METERING IN RESIDENTIAL BUILDINGS WITH FOUR OR MORE FLOORS, INCLUDING PRIOR COMPANY APPROVAL LANGUAGE	TEXT DOCUMENT REVISION
8143.48-032	UPDATED CONDUIT ENTRANCE BUBBLE ON PAGE 2	DRAWING REVISION
8241.68-022 and 8241.68-032	FIXED MISSING METER SOCKET BUBBLE	DRAWING REVISION
8261.76-022	ADDED BUBBLE 24 TO PAGE 2 & PAGE 4	DRAWING REVISION
9520.0-503	ADDED CUSTOMER RESPONSIBILITY TO INSTALL AND MAINTAIN A STUB-OUT MARKER UNTIL CONDUIT INSTALLATION IS COMPLETE	TEXT DOCUMENT REVISION
9520.24-001	CREATED THE STANDARD FOR THE STUB OUT IN THE PFD	NEW STANDARD ADDED
9550.0-000	ADDED VEHICULAR SPEED-BASED CLEARANCE REQUIREMENTS, INCLUDING INCREASED SETBACKS AND BOLLARD/BARRIER GUIDANCE BASED ON TRAFFIC SPEED	TEXT DOCUMENT REVISION
9550.0-000	UPDATED SCOPE TO SHOW ONLY FOR EQUIPMENT ON CUSTOMERS PROPERTY	TEXT DOCUMENT REVISION
9550.2-001 and 9550.2-002	REMOVED BLANK TABLE ON PAGE 2	DRAWING REVISION
9550.2-054 and 9550.2-058	CREATED BOUNDARY HATCHING TO ADD CLARITY	DRAWING REVISION
9550.66-000	ADDED STANDARD FOR VAULT REQUIREMENTS	NEW STANDARD ADDED
3 documents in 8211-	ADDED DIMENSION BUBBLES TO PAGE 2	DRAWING REVISION

Summary	Revision	Revision Type
6 documents in 9550-____	CHANGE THE PROVIDED BY FROM EVERYG TO CUSTOMER	REQUIREMENT TABLE REVISION
10 documents in 8241-____	REMOVED CONDUIT DEPTH REQUIREMENT FOR SECTION 8241	REQUIREMENT TABLE REVISION
24 documents in 8216-____	ADDED STANDARD FOR COMMERCIAL SINGLE OCCUPANT OVERHEAD (CSOO) - GROUND MOUNTED FROM POLE	NEW STANDARD ADDED
9 documents	CHANGED THE BUILDING TO COMMERCIAL	DRAWING REVISION
12 documents	REMOVED MODULAR 400 AMP METER SOCKET STANDARDS	REMOVED STANDARD
12 documents	ADDED CLARIFICATION TO THE GROUNDING REQUIREMENTS	TEXT DOCUMENT REVISION
15 documents in Chapter 81.1	CREATED EV STANDARDS	NEW STANDARD ADDED
58 documents in Chapter 81.4	ADDED CONDUIT BENDING RADIUS DATA TO THE SERVICE EQUIPMENT SIDE OF THE CONDUIT RUN FOR RESIDENTIAL SERVICES.	REQUIREMENT TABLE REVISION
73 documents in Chapter 82.2	ADDED MAXIMUM LENGTH OF 65 FEET TO CONDUIT CT CONDUCTOR.	REQUIREMENT TABLE REVISION
143 documents	LINES REMOVED FROM CONDUCTORS IN SERVICE DRAWINGS.	DRAWING REVISION
152 documents	ADDED REQUIREMENT TO MARK THE END OF THE STUBOUT.	REQUIREMENT TABLE REVISION
450 documents	ADDED REQUIREMENT FOR POINT OF ATTACHMENT TO BE WORKED OFF LADDER.	REQUIREMENT TABLE REVISION
450 documents	ADDED REQUIREMENT OF 3 FOOT OF SERVICE CONDUCTOR OUT OF WEATHERHEAD	REQUIREMENT TABLE REVISION
478 documents	ADDED REQUIREMENT FOR SERVICE ENTRANCE CONDUCTORS TO NOT CROSS SERVICE CONDUCTOR.	REQUIREMENT TABLE REVISION