

January 1, 2014

THE CITY OF ASPEN  
ELECTRIC DEPARTMENT ENERGY STANDARD  
FOR  
ELECTRIC INSTALLATION AND USE

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## INTRODUCTION

City of Aspen Electric Department is dedicated to providing safe, economical and reliable service to its customers. It is the policy of The City of Aspen to serve all its customers in an orderly manner and assist in securing a more beneficial use of electricity. The "City of Aspen Electric Department Energy Standard for Electric Installation and Use" contains the requirements and uniform standards necessary to achieve this policy. Uniform enforcement of these standards throughout The City of Aspen will expedite service connections and treat each of our customers equally and fairly. Therefore, our employees are instructed and obligated to require adherence to these standards and procedures.

The "City of Aspen Electric Department Energy Standard for Electric Installation and Use" is a valuable timesaving publication that will help to determine the necessary requirements for customers' wiring intended to be connected to The City of Aspen's distribution system. This publication will help you work more efficiently and aid in getting a utility connection established with minimum inconvenience. It also provides for the safety and reliability of our customers and safe working conditions for our personnel.

The City of Aspen's complete Rules and Regulations are contained in its Tariffs as filed with the various state regulatory agencies. Service furnished by The City of Aspen is subject to The City of Aspen's "City of Aspen Electric Department Energy Standard for Electric Installation and Use", the National Electrical Safety Code®, and the Rules and Regulations of these Regulatory Commissions.

The "City of Aspen Electric Department Energy Standard for Electric Installation and Use" is produced by City of Aspen Electric Department. Questions concerning interpretation of its contents shall be directed to Electric Utility Engineer

City of Aspen Electric Department

## FOREWORD

This publication has been prepared to assist you in planning your electrical installation. The uniform standards contained in this publication are necessary to enable The City of Aspen to serve all its customers in an orderly manner and expedite service connections.

New, rewired, altered, or repaired wiring installations intended for connection to The City of Aspen's distribution system shall comply with the rules of The City of Aspen, the National Electrical Code® and any other codes or regulations in effect in the area served. The City of Aspen does not assume the function of inspecting customers' wiring for adequacy, safety or compliance with electrical codes. Such responsibility remains with the customer and inspectors.

Questions concerning large and/or complicated electrical projects should be directed to The City of Aspen in advance of construction and/or purchase of equipment. This will reduce the risk of project delays or expensive changes during construction.

The City of Aspen Electric Department will discuss requests for exceptions to these standards with the customer. Only requests for exceptions based on extenuating circumstances will be evaluated. The request shall be submitted in writing in advance of construction and/or purchase of equipment. Requests are granted on a case-by-case basis and will be responded to in writing. Exceptions will not be granted verbally. The written response will indicate whether the request has been granted or denied.

Exceptions shall be submitted to the appropriate City of Aspen Office

Due to constant progress in the development of materials and methods, The City of Aspen may revise this publication from time to time. Users of this book who notice better ways of providing services are encouraged to submit suggestions for changes to these standards. Revisions are necessary for continued application of work practices.

Requests for revisions shall be submitted in writing to City of Aspen Electric Department. If the proposed suggestion offers equal or better safety and reliability than the current practice, then the suggestion will be reviewed for possible addition to or replacement of the current practice.

This publication is available at The City of Aspen's website: <http://www.aspenpitkin.com>

**EXCEPTION / REVISION FORM**

See Section 5 Special Rules:

This form is to be used when requesting exceptions or revisions to "The City of Aspen Electric Department Energy Standard for Electric Installation and Use". Please print legibly or type.

I seek a revision to the following Section(s): \_\_\_\_\_

I seek an exception to the following Section(s): \_\_\_\_\_

Exceptions will not be granted if reliability or safety is compromised.

Address of Job: \_\_\_\_\_

This Section is responsible for the following problem(s):

I request the following exception/revision:

This practice will maintain/improve safety and reliability by:

SUBMITTER: \_\_\_\_\_ DATE: \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_

COMPANY ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

## SECTION 1: DEFINITIONS

Note: The following definitions are furnished for the appropriate interpretation of this document and are not necessarily universally accepted definitions.

### ACCESS POINT

The point defined by the intersection of the customer's property line and The City of Aspen-owned conductors crossing it, which serves that customer. When a customer is to be served from a distribution line in an easement on the customer's property, the access point is the switch cabinet bay for primary underground (UG), or the splice box or pedestal for secondary underground (UG) from which The City of Aspen-owned conductors will be fed.

### AGENT

One who is authorized to act for another under a contract or relation of agency, for The City of Aspen or the customer.

### AMR - AUTOMATED METER READING

An automated method of reading electric registers (indexes).

### APPLICANT

The property owner, lessee, sub-lessee, their agent and/or contractor applying for electric service from The City of Aspen.

### AUTHORIZED CLOSED LOOP

Authorized use of electric service that is temporarily not being metered. (See definition for CLOSED LOOP.)

### BUS DUCT

A preassembled unitized device containing secondary electrical bus.

### CLASSIFICATION OF METERING

Commercial and Industrial (See definition for COMMERCIAL AND INDUSTRIAL METERING) Residential (See definition for RESIDENTIAL METERING)

### CLOSED LOOP

Temporary unmetered electric service. (See definitions for FLAT TAP and JUMPERED.)

### COLD SEQUENCE METERING

The utilization of a fault-current limiting disconnect device between the electric meter and the supply source, adequate to protect meters from excessive fault currents. Refer to Section 4, COLD SEQUENCE METERING.

### COMMERCIAL AND INDUSTRIAL METERING

Metering of any service used for the operation of a business, whether or not for profit, shall be considered as a commercial or industrial enterprise. Includes metering of all services other than residential.

### CONDUIT

Standard tubular material used for mechanical protection of electrical systems which may be exposed, buried beneath the surface of the ground, or encased in a building structure as required. (See definition for DUCT.) NOTE: For the purpose of this publication, the terms Conduit and Duct are used interchangeably.

#### CONSTRUCTION ALLOWANCE

The portion of the construction cost performed by The City of Aspen at its expense.

#### CONSTRUCTION TRAILER

A structure built on a permanent chassis designed to be transportable which is intended for installation on a site without permanent foundation.

#### CONTRACTOR

Any person, The City of Aspen or corporation acting under contractual agreements for either The City of Aspen or for the customer.

#### CURRENT TRANSFORMER (CT)

An instrument transformer designed for the measurement or control of current.

#### CUSTOMER

The applicant or user of electric service in whose name the service with The City of Aspen is listed.

#### DATA PULSES

Output pulses (KYZ) generated by the electric meter for use by the Customer.

#### DEAD-END EQUIPMENT

Various devices used to terminate service conductors.

#### DIVERSION OF ELECTRICITY

Unauthorized connection to The City of Aspen's electric facilities where electric service is being used and not metered (e.g. when the electric meter has been bypassed without a closed loop authorization from The City of Aspen).

#### DUCT

Standard tubular material used for mechanical protection of electrical systems which may be exposed, buried beneath the surface of the ground, or encased in a building structure as required. (See definition for CONDUIT.) NOTE: For the purpose of this publication, the terms Conduit and Duct are used interchangeably.

#### EMT

Electric Metallic Tubing (NE )

#### EXCESS FACILITIES

In those instances where The City of Aspen provides distribution or metering facilities at the customer's request, in excess of the facilities necessary to supply service to the customer, the customer shall be required to contract to pay The City of Aspen for such facilities and to pay The City of Aspen annually an amount to cover the cost of insurance, replacement (or cost of removal), licenses, fees, taxes, operation, maintenance, and appropriate allocable administrative and general expenses of such excess distribution facilities.

#### FLAT TAP

Temporary unmetered electric service. (See definitions for CLOSED LOOP and JUMPERED.)

#### GRC

Galvanized Rigid Conduit (NEC]®)

#### HIGH-LEG

The phase having the higher phase voltage to ground on a 4-wire delta-connected service, where the midpoint of one phase winding is grounded.

#### HOT SEQUENCE METERING

The electric meter is connected directly to the service conductors without the use of a fault-current limiting disconnect device between the electric meter and the supply source.

#### ICE AND SNOW SHIELD, METER

A protective device used to prevent falling ice or snow from damaging the electric meter.

#### IMC

Intermediate Metallic Conduit (NEC)®)

#### INSPECTOR

The electrical inspector of the Public Authority.

#### INSTRUMENT TRANSFORMER

A transformer that reproduces in its secondary circuit, the voltage or current proportional to its primary circuit.

#### ISOLATED TRANSFORMER BANK

A transformer bank which provides electrical service to a single customer.

#### JOINT USE AGREEMENT

A contractual agreement made between The City of Aspen and a third party allowing the use of The City of Aspen property or facilities.

#### JUMPERED

Temporary unmetered electric service. (See definitions for CLOSED LOOP and FLAT TAP.)

#### MANUFACTURED HOME

A structure which is transportable and intended for installation on a permanent foundation meeting the definition of a Manufactured Home as defined in 2002 NEC} ®Article 550.2, or as may be amended.

#### MEANS OF ATTACHMENT

Fittings used to attach service-drop conductors.

#### METER/METERING EQUIPMENT

The equipment necessary to measure the customer's electric energy use and demand including meter socket, instrument transformers, protective device and meter.

#### MOBILE HOME

A structure built on a permanent chassis designed to be transportable and intended for installation on a site without permanent foundation.



#### MULTIPLE METER CENTER

A pre-assembled multiple metering unit or fabricated meter center using meter sockets where two or more customers are metered at a common location.

#### NEC- NATIONAL ELECTRICAL CODE

A publication of the National Fire Protection Association, Inc.

#### NESC - NATIONAL ELECTRICAL SAFETY CODE

A publication of the Institute of Electrical and Electronic Engineers, Inc. as adopted by ANSI.

1. National Electrical Code® and NEC- are registered trademarks of the National Fire Protection Association, Inc., Quincy, MA 02269.
2. National Electrical Safety Code® and NESC:- are registered trademarks and service marks of the Institute of Electrical and Electronics Engineers, Inc., New York, NY 10017

#### NOMINAL VOLTAGE

Designation of the value of the normal effective difference in potential between any two appropriate conductors of the circuit.

#### NON-STANDARD DESIGN

Construction not conforming to The City of Aspen's standard method of design because of the customer's request. The customer may be charged for the additional cost incurred by The City of Aspen.

#### POINT OF ATTACHMENT

The point at which the service-drop conductors are attached to a building or other structure.

#### POINT OF DELIVERY

Point where The City of Aspen's electric facilities are first connected to the electric facilities of the customer.

#### PRIMARY METERING

Metering of service voltages above 480V nominal.

#### PUBLIC AUTHORITY

The municipal, county, or state authorities having inspectors and jurisdiction to inspect electrical installations.

#### PVC

Polyvinyl Chloride (NEC)

#### RACEWAY

Any channel for holding bus bars, cables, or wires, which is designed for this purpose.

#### RESIDENTIAL METERING

Metering of services used for the exclusive use of the individual customer for domestic purposes.

#### READILY ACCESSIBLE

An area that can be casually accessed through a doorway, ramp, window, stairway, or permanently mounted ladder by a person on foot who neither exerts extraordinary physical effort nor employs special tools or devices to gain entry is considered readily accessible. A permanently mounted ladder is not considered a means of access if the bottom rung is 8 ft or more from the ground or other permanently installed accessible surface.

#### RULES AND REGULATIONS

The rules, regulations and condition of service as filed with The City of Aspen.

#### SECONDARY CONDUCTORS

That part of The City of Aspen's distribution system, which connects the secondaries of The City of Aspen's distribution transformers to the service drop or service lateral.

#### SERVICE

The furnishing of electric energy for the exclusive use of the individual customer.

#### SERVICE-ENTRANCE CONDUCTORS, UNDERGROUND SYSTEM

The service conductors between the terminals of the customer's service equipment and the point of connection to the service lateral.

#### SERVICE EQUIPMENT

Necessary equipment, usually consisting of a circuit breaker or fuseable disconnect switch and their accessories, located near the point of entrance of the supply conductors to a building and intended to constitute the main control and means of cutoff for the supply to that building.

#### SERVICE LATERAL

The underground service conductors between The City of Aspen secondary distribution system and/or transformer terminals and the connection to the service-entrance conductors in a terminal box or meter socket located outside the building wall. Where the meter is located in the building and no terminal box exists outside the building, the point of connection shall be considered the point of entrance of the service conductors into the building.

#### SERVICE TERRITORY VOLTAGE TRANSFORMER (VT)

An instrument transformer intended for use in the measurement or control of a circuit and designed to have its primary winding connected in parallel with the circuit.

#### VOLTAGE UNBALANCE

Maximum voltage deviation from average voltage.

## **SECTION 2: GENERAL INFORMATION**

Service furnished by The City of Aspen is also subject to: The City of Aspen Electric Department Energy Standard for Electric Installation and Use, the National Electrical Code® and the National Electrical Safety Code®.

The City of Aspen assumes no responsibility whatsoever for the manufacturer's, supplier's, electrician's or engineering consultant's compliance with all applicable NEC ®and NESC ®codes as well as all local and state codes.

Any waiver at any time of The City of Aspen's rights or privileges under the Rules and Regulations will not be deemed a waiver as to any breach or other matter subsequently occurring.

The following are brief statements of those operating rules and practices, which affect the majority of connections made to The City of Aspen's lines. Where information not included herein is needed. The City of Aspen Electric Department will provide assistance.

### **EFFECTIVE DATE**

This edition of the City of Aspen Electric Department Energy Standard for Electric Installation and Use may be used at any time on or after the publication date. Additionally, this edition shall become effective no later than 120 days following its publication date.

### **INTENT**

The word "shall" indicates provisions that are mandatory.

The word "should" indicates provisions that are normally and generally practical for the specified conditions. The word "may" indicates possibility.

The words "recommend" and "recommended" indicate provisions considered desirable, but not intended to be mandatory.

Exceptions to a rule have the same force and effect required or allowed by the rule to which the exception applies. All requests for exceptions shall be submitted in writing and will be responded to in writing. Verbal exceptions will not be granted.

Requirements of the NE, NES, or the Public Authority which are more stringent than the requirements of this document will take precedence.

## **APPLICATION FOR SERVICE**

The customer may contact The City of Aspen Electric Department to secure information relative to any application for new electric service connections or changes in existing service. Service telephone numbers for The City of Aspen can be found at the end of this Section.

Before an electric service connection can be made to the customer's (applicant's) wiring system, it is necessary that:

- 1) The customer has made application for service.
- 2) The applicant has met all requirements of The City of Aspen Electric Department Energy Standard for Electric Installation and Use and the Rates, Rules, Regulations and Extension Policy in effect and on file with The City of Aspen at the time of application.
- 3) The City of Aspen has completed its construction.
- 4) The Public Authority has notified The City of Aspen of approval of the installation by providing an inspection release.

Where no Public Authority has jurisdiction, The City of Aspen, for the customer's protection, may require written confirmation from the wiring electrician that the customer's installation conforms to the National Electrical Code®

The City of Aspen does not assume responsibility for the design, operation or condition of the customer's installation.

The City of Aspen will not install facilities to serve a customer until the customer agrees to take the service under the applicable Rate Schedule and all applicable charges for construction and service, as required by The City of Aspen's Extension Policy, are paid to The City of Aspen. Under no circumstances shall a customer dig in city right of way (alley or street) between November 1st and March 31st.

The City of Aspen shall not under any circumstances be required to make an extension, which would be unprofitable and thereby cause undue hardship upon other customers of The City of Aspen.

It is extremely important that The City of Aspen be consulted in advance of the finalization of the customer's plans regarding The City of Aspen's electric service requirements.

## **RATE SCHEDULES**

Electric service is supplied to customers under The City of Aspen's established rates, rules, regulations, and marketing programs. Rate brochures for residential, commercial, and industrial customers, covering rate schedules and their application are available from The City of Aspen upon request. The City of Aspen Electric Department will assist the customer in understanding The City of Aspen's rates and in applying them to the customer's load conditions.

## **SERVICE AND LIMITATIONS**

Service will be rendered to the customer from The City of Aspen's nearest suitable power line of sufficient capacity to furnish adequate service at the service voltage available. Absolutely no secondary power supplies shall be installed in the City of Aspen Public Right of Way other than alleys where service is being requested. Service shall not be used by the customer for purposes other than those specified in the applicable Rate Schedule.

## **CLOSED LOOP I FLAT TAP I JUMPERED**

Closed loops may be granted by special permission of The City of Aspen. If permission cannot be obtained, service must be supplied through a temporary meter. Refer to Section 4, METERING, Temporary Unmetered Services.

## **CONNECTION**

Connection to or disconnection from The City of Aspen's distribution system shall be made by The City of Aspen. Under no circumstances will the customer be permitted to access The City of Aspen's underground facilities, or make connections to The City of Aspen's lines, except as specified in SAFETY, Unlock, Open and/or De-energize any Electric Power Equipment Procedures in this Section.

The City of Aspen shall be notified when it is necessary to cut the meter seal due to situations where the electric service must be disconnected during an emergency or where it necessary to access the meter socket by a qualified person. No persons, other than employees or agents of The City of Aspen, may relocate meters or other equipment owned by The City of Aspen.

## **CUSTOMER-OWNED METER EQUIPMENT RESTRICTIONS**

Under no circumstances shall customers' equipment:

- 1) Be connected to, or in any way be served from, the secondary terminals of the voltage and/or current metering transformers.
- 2) Be installed within any metering enclosures including, but not limited to, metering transformer cabinets, transformer compartments, or meter sockets.
- 3) Be connected to an unmetred bus or conductor.

## **DIVERSION OF ELECTRICITY**

Under no circumstances shall devices or attachments be connected to The City of Aspen's facilities in such a manner as to permit the use of unmetred energy except in emergencies where specifically authorized by The City of Aspen. Refer to Section 4, METERING, Temporary Unmetred Services.

## **EASEMENTS FOR THE CITY OF ASPEN'S FACILITIES**

The customer shall provide, at the request of and at no cost to The City of Aspen, necessary easements and suitable land area or building space owned and controlled by the customer for installation, construction, reconstruction, maintenance, operation, control and use of The City of Aspen's underground facilities used or useful to render service to the customer.

## **CUSTOMER'S RESPONSIBILITY**

The customer shall give authorized employees of The City of Aspen access to the premises of the customer in order to obtain information concerning connected load, to measure or test service, to read meters, or for other purposes incidental to the supplying of electric service.

It is the responsibility of the customer to adequately protect The City of Aspen's equipment located on the customer's property against damage. The customer shall be responsible for any damages or loss resulting from improper protection or neglect.

Pad-mounted transformers, switchgear, and metering equipment shall be installed with adequate clearances for normal maintenance work as specified in Section 5 and the Illustrations Section.

Customers shall connect their equipment so that the load at the point of delivery will be balanced as nearly as practicable. Where three-phase service (except 3-phase, 4-wire delta) is supplied, the customer will attempt to connect equipment so that the load in any one phase at the point of delivery will not exceed the load in any other phase by more than ten (10) percent. Refer to Section 6, THREE-PHASE VOLTAGE UNBALANCE.

## **CUSTOMER-OWNED FACILITIES**

Distribution facilities beyond The City of Aspen's point of delivery are to be installed, maintained, and operated by the customer under all the following conditions:

- 1) All energy is to be metered at one location.
- 2) Each installation is subject to the provisions of The City of Aspen's Rules and Regulations, the applicable Rate Schedule, and the approval of The City of Aspen.
- 3) Under rates providing for delivery at secondary voltages, The City of Aspen will install and maintain only a single transformer installation for the customer, except as specified in Section 4, SERVICES.
- 4) The City of Aspen will not install or permit the installation of any of the following customer-owned equipment on The City of Aspen poles: meter sockets, metering equipment, distribution wires, posters, banners, placards, radio or television aerials, or other objects or devices. Only if requests are made by a governmental authority responsible for the public right-of-way and approved by The City of Aspen, can banners be strung from one steel streetlight standard to another steel streetlight standard.

Exception: Wires for municipal fire alarm systems, police signal systems, customer's underground service extensions to the overhead system, customer's dead-end equipment, or equipment covered by Joint Use Agreement.

Note: Meter sockets and other metering equipment shall not be installed on The City of Aspen poles unless specifically covered by Joint Use agreement.

- 5) The customer's distribution system shall be in conformance with the National Electrical Code®, the wiring regulations of the Public Authority.
- 6) The distribution facilities of the customer beyond the point of delivery shall be connected to The City of Aspen's distribution system at one central point through protective devices, approved by The City of Aspen, installed and maintained at the expense of the customer.
- 7) Customers shall maintain their distribution system in a safe operating condition so that it does not constitute a hazard to themselves or to other customers or persons. The City of Aspen assumes no responsibility for inspection of the customer's lines and facilities and shall not be liable for injury to persons or damage to property when occurring on or caused by the customer's lines or equipment.
- 8) Refer to Section 4 for additional requirements for customer-owned facilities.

## **SAFETY**

Refer to federal regulations and individual state laws concerning safety requirements relating to high voltage power lines of public utilities, which produce, transmit, or deliver electricity. The following explanations should not be regarded as a substitute for reading the laws, but are meant to highlight some of the major points.

Underground Safety

Caution: Stakes, flags or painted lilies mark the locations of underground utilities. Please dig very carefully within 18" on each side of the markings.

Anyone planning to dig in or near a public road, street, alley, right-of-way, or utility easement shall notify The City of Aspen of your intent, no less than 48 hours (2 working days) before you dig. Call the telephone number listed below for your locale.

Colorado, Utility Notification Center-----800-922-1987

City of Aspen Electric Department-----970-920-5148

After Hours: City of Aspen Dispatch-----970-920-5310

Utility facilities may be buried along the rear, side, and front property lines in any of the residential areas. Residential service lines may cross homeowner's front and back yards. Many facilities are also located within the street, alley, or highway rights-of-way.

Color Codes: (Verify color codes used within your locale)

Red	Electric Power Lines, Cables, Conduit and Lighting Cables
Yellow	Gas, Oil, Steam, Petroleum, or Gaseous Materials
Orange	Communication, Alarm or Signal Lines, Cables or Conduit, including Cable Television
Blue	Water, Irrigation and Slurry Lines
Green	Storm Drain Lines/Sewer
Pink	Survey Markings
White	Proposed Excavation

Change of Grade

The grade in any public right-of-way or easement shall not be changed without first contacting The City of Aspen to determine if electric facilities are contained within the right-of-way or easement. Permission may be granted to change the grade by The City of Aspen Electric Department if the grade change will not affect the minimum clearance requirements. The City of Aspen construction may be necessary if the grade change will necessitate moving equipment or facilities. The City of Aspen Electric Department can provide an estimate for the cost to relocate facilities when necessary to provide adequate clearance.

Unlock, Open and/or De-energize any Electric Power Equipment Procedures

The City of Aspen established procedures to assure maximum safety to protect all individuals prior to unlocking, opening and/or de-energizing electric power equipment where access by unauthorized personnel is required. The following procedures apply to, but are not limited to, energized City of Aspen facilities such as vaults, transformers, manholes, switchgear and secondary pedestals:

- 1) The customer shall request and receive access authorization prior to The City of Aspen Electric Department unlocking, opening, and/or de-energizing any electric power equipment.

- 2) Normally, a transformer will not be permanently energized until the secondary service is complete. In cases where it is necessary to leave the transformer energized, such as installing additional secondary conductors, The City of Aspen Electric Department will unlock the transformer and stand by while work is performed and relock the transformer when the work is completed.
- 3) When a de-energized transformer is opened by The City of Aspen Electric Department for a contractor to pull cable, the contractor shall relock the transformer and notify The City of Aspen Electric Department before leaving the worksite.
- 4) Charges for work may apply when The City of Aspen personnel are required to open and close transformers or other electric equipment and stand by while work is performed around energized equipment. The City of Aspen Electric Department will determine the amount to be charged.

#### Energization of Electric Service

The City of Aspen will not energize an electric service or set meters on new, rewired, altered, or repaired wiring installations unless all of the following conditions have been met:

- 1) The premises served have been properly identified by the customer.
- 2) Meter trace verifications have been performed by The City of Aspen's Electric Department.
- 3) An inspection release from the local Public Authority has been received by The City of Aspen.

Note 1: In locations where there is no local Public Authority, the wireman shall submit a signed and dated letter to The City of Aspen's Builders Call Line attesting that the electrical installation has been completed and installed according to the current NEC and any other codes that apply before electric service is energized.

- 4) The City of Aspen Electric Department has verified that the service entrance shows no continuity, load, or voltage feedback on the load-side terminals of the electric meter socket or CT metering installation.
- 5) The City of Aspen Electric Department has verified that the customers' equipment has a mechanical means to disconnect and isolate equipment from the load-side terminals of the self-contained electric meter socket or current transformers (CT's). This requirement includes, but is not limited to, any load produced by transformers (dry-type or oil-filled) that are used for a separately derived system.

Note 1: For clarification, this requirement is not to be interpreted as meaning an additional main disconnect is required on the load side of a cold sequence meter installation.

Note 2: Once a service is energized, it shall be the customer's responsibility to turn on breakers or close disconnecting switches.

- 6) The City of Aspen Electric Department has verified that the electric service meets all of the requirements in Section 4.

Note 3: The meter socket shall meet all requirements listed under METER SOCKETS in Section 4.



CITY OF ASPEN ELECTRIC DEPARTMENT

**COURTESY LOCK LIABILITY WAIVER**

I, \_\_\_\_\_, (referred to herein as "Owner") an electrician duly licensed by the State of Colorado, request access to transformers owned by City of Aspen Electric Department., on behalf of myself and, if applicable, the undersigned company (herein "We" or "Us"). We agree that the City of Aspen Electric Department will place a Courtesy Transformer Lock on a transformer at our request allowing us or our employees access to such. We hereby assume full responsibility for all onsite activities, equipment, and facilities, whether owned and maintained by City of Aspen Electric Department or by us, for as long as the Courtesy Transformer Lock is installed, and we agree to perform our activities and operate such equipment and facilities, according to applicable electric standards of City of Aspen Electric Department.

In addition to the City of Aspen Electric Department standards and requirements, we agree to comply with all applicable provisions of Federal, State, and Municipal construction, safety, health and sanitation statutes, codes, and regulations, and by higher than minimum standards, if necessary or prudent. We shall furnish City of Aspen Electric Department with any documentation necessary to show such compliance.

We agree to defend, pay on behalf of and hold harmless City of Aspen Electric Department and its directors, officers, agents, and employees from all claims of whatsoever nature or kind, including those brought by employees of the undersigned owner or company or subcontractors, arising out of or as a result of any act or failure to act, whether or not negligent, in connection with the performance of the work to be performed pursuant to this contract by the undersigned, its employees, agents and subcontractors. We agree to defend and pay all costs in defending these claims, including attorney fees.

We also agree to pay to City of Aspen Electric Department any damages to its property, or injury to its employees or agents, occurring during the period of granted access, and shall be liable for City of Aspen Electric Department attorney's fees and costs incurred in enforcing the provisions of this paragraph.

Further, we agree to maintain public liability and property damage insurance (including automobile public liability and property damage insurance) to cover the obligations set forth above. The minimum insurance limits of liability shall be \$1,000,000 bodily injury and property damage. We further agree to maintain statutory minimum or greater levels of Workers' Compensation Insurance. City of Aspen Electric Department shall receive a minimum 30 day notice in the event of cancellation of insurance required by this agreement.

We shall furnish a certificate of insurance to City of Aspen Electric Department showing that the above obligations and requirements are provided for by a qualified insurance carrier prior to access being granted.

We will immediately notify City of Aspen Electric Department when our access to the transformers is no longer needed or required.

---

NAME OF OWNER/COMPANY NAME: \_\_\_\_\_ TELEPHONE: \_\_\_\_\_

---

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

### **SECTION 3: CHARACTER OF SERVICE AVAILABLE**

Contact The City of Aspen for information regarding availability of any desired type of service in a given locale. Delays and perhaps unnecessary expense may be avoided by contacting The City of Aspen in advance of construction.

#### **TYPES OF SERVICE**

The service voltages listed below may not be available. The City of Aspen will assist in determining whether the service voltage requested is offered under The City of Aspen's Tariffs within the service territory. These service voltages are all derived from grounded transformer banks. Depending upon the service voltage, either the neutral or one phase conductor is grounded at the supply transformer and will be run from the transformer installation to the meter socket. Customers requiring an ungrounded service for operation of a ground detection system, or for other operations permitted by the National Electric Safety Code®, shall submit an exception request detailing the special circumstances necessitating the request. Customers accepting three-phase service from an open-delta transformer bank shall sign a liability waiver form indicating the customer's acceptance of potential damage to customer's equipment due to voltage unbalance.

- 1) 10 3W- 120/240VAC, 240/480VAC or 120/208VAC
- 2) 30 4W Wye- 120/208VAC or 277/480VAC
- 3) Distribution (Primary) Voltage

#### **METER SOCKETS FOR TYPES OF SERVICE**

1) Self-Contained- Supplied by the customer (Refer to Section 4, METER SOCKETS):

- a) 10 3W and 30 3W Delta- 5 terminal meter sockets
- b) 30 4W Wye and 30 4W Delta- 7 terminal meter sockets

2) Transformer Rated (CT 's)- Supplied by The City of Aspen:

- a) 10 3W and 30 3W Delta- 8 terminal meter sockets
- b) 30 4W Wye and 30 4W Delta- 13 terminal meter sockets