

Minnesota Power

construction guide **Home Edition**

OUTDOOR
AND AREA
LIGHTING
BUDGET
BILLING
REBATES



Table of Contents

Your Residential Electric Service	2
Application and Planning	2
Confirmation	2
Ready for Service	2
Scheduling and Installation	5
Billing	5
Costs to Provide Power	6
Basic Costs	6
Extensions	6
Additional Costs	6
Temporary Service	7
Cover-up	7
Right-of-way	8
Residential Programs	9
Dual Fuel	9
Controlled Access	10
Triple E New Construction	10
Energy Saving Tools	11
Installation of Minnesota Power Electric Service	12
Overhead Installation	12
Underground Installation	14
Connecting to Ground-Mounted Facilities	16
Meter Requirements	17
Bypass Metering	17
Self Contained Metering	17
Meter Location	17
Temporary Metering Requirements	17
Extension Rules	Online
Electric Service Regulations	Online
Outdoor and Area Lighting	18
Scheduling	18
Application Forms	19
Call Numbers	27
Checklist	28



Your Residential Electric Service

The information contained in this handbook will help you understand the steps involved in establishing electric service. We outlined each step in the process, including both an overview and detailed information. A well-prepared application, a well-prepared site and good communication with Minnesota Power are the best ways to keep your project on track.

Step 1. Application and Planning

Your Role: Minnesota Power will be happy to serve your energy needs if your property is within Minnesota Power's service territory. To determine if Minnesota Power will be your electric service provider, please visit www.mnpower.com, call the New Construction Center at 1-877-535-0394 or 218-720-2644 or e-mail us at: newconstruction@mnpower.com.

Next, complete and return the *Application for Service* (form 6034D). Mail, fax or e-mail both your application and your site plan to:

Mail: Minnesota Power
Attn: New Construction Center
PO Box 1001
Duluth, MN 55806-1001

Fax: 218-720-2795

E-mail: newconstruction@mnpower.com

Step 2. Confirmation

Our Role: After we receive your completed application, a Minnesota Power representative will contact you. They will discuss your electric service needs, and if needed, set up an appointment for a site visit. A Minnesota Power representative will provide site requirements and cost estimates after the site visit.

Step 3. Ready for Service

Your Role: Complete all of the requirements to prepare the site for service installation.

We ask that the customer prepares the site as follows:

- Mark all property corners with stakes, with "Property Corner" labeled on the stake.
- Identify approximate location where customer's electric service panel will be installed.
- Grade and landscape within six inches of final grade where the Minnesota Power representative has determined facilities will be installed.

- Maintain a service path clear of obstructions from the Minnesota Power electric facilities to the meter location.
 - A minimum 10-foot-wide path for underground installation.
 - A minimum 30-foot-wide path for overhead installation.
- Locate and mark privately-owned underground facilities with stakes, spray paint or flags.
- In the event that we need to cross your driveway with Minnesota Power underground electric facilities, we ask that a four-inch Schedule 40 conduit be installed, extended 10 feet beyond each side of the driveway.
- If the customer, requires any excavation at the site, please visit the Gopher State One Call website: www.gopherstateonecall.org, or dial 811 to have underground, utility-owned facilities marked.

Location of Underground Facilities

It is important for Minnesota Power to know the location of all existing and planned facilities, structures or other potential obstructions to ensure a clear path for your electric service lines. Be sure to clearly mark these facilities as noted on your submitted site plan.

Utility-owned Facilities

Minnesota Power will contact Gopher State One Call to have underground, utility-owned facilities located and marked on your property, for example: water, gas, electric, sewer, telephone and cable. Gopher State One Call requires each party to obtain their own One Call ticket for excavation.

Privately-owned Facilities

The customer is responsible for the location and marking of privately-owned underground facilities, for example: water, gas, electric, sewer, telephone and cable.

Minnesota Power (and/or its contractors) will not be held responsible for damage to private underground facilities that have not been properly identified and marked.

For further information on companies that provide private locating, please contact Minnesota Power at 218-720-2757.



Electrical Inspections

Minnesota Power requires a copy of the *Request for Electrical Inspection* or verification from the local electrical inspector prior to energizing any service.

Outside the city of Duluth

Within the state of Minnesota jurisdictional area, the homeowner doing the electrical work or electrical contractor will be responsible for filing a *Request for Electrical Inspection* with the state of Minnesota and for providing a copy to Minnesota Power.

For a list of licensed and bonded electrical contractors, go to: <http://www.dli.mn.gov/>, or call 651-284-5026.

Submit the form to the state along with the appropriate fees. If you have any questions regarding the fees, please contact the state of Minnesota at 651-284-5026. Keep a copy of the form for your own records.

Send a copy of the form to:

Mail: Minnesota Power
Attn: New Construction Center
PO Box 1001
Duluth, MN 55806-1001

Fax: 218-720-2680

E-mail: newconstruction@mnpower.com

Inside the city of Duluth

Within the city of Duluth, it is the responsibility of the electrical contractor to contact the city of Duluth for the electrical inspection. Once the inspection has been completed, the city electrical inspector will notify Minnesota Power.

If you have any questions regarding electrical codes, please contact your electrical contractor or the local inspector.

Fees

Payment for line extension and/or temporary electric service, if required, must be received by a Minnesota Power representative prior to scheduling your installation. Minnesota Power does not offer any financing options. Full payment can be made in the form of check, money order, credit card (Visa, MasterCard, Discover) or debit card. A 4% transaction fee will be added to all credit card payments.

Step 4. Scheduling and Installation

Our Role: Minnesota Power will make every effort to meet your requested completion date. The amount of time it takes to complete the installation depends on a variety of factors. Once all requirements are met, the work will be scheduled.

Your Role: During this step of the process, make sure your site remains ready for service. Inform your builder to keep the path where the new service will be installed clear of obstructions. Please be sure to keep us informed of any design or scheduling changes.

Please provide the name of the person that we can speak with about the details and coordination of your project.

Step 5. Billing

Our Role: Billing will begin as soon as the electric meter is installed. The bill will include both a monthly minimum service charge and an energy usage charge.

Your Role: Once the home is occupied, the new occupant/homeowner is responsible for contacting us to have the electric bill transferred into their name. This is only necessary if the account was previously in the name of the builder/general contractor.



Cost to Provide Power to Your Site

Basic Costs

The Minnesota Power representatives will design the electrical service extension, determine the locations of facilities and estimate extension costs. Estimates depend upon location of existing distribution facilities, location of customer's buildings on the property and the design decision of overhead or underground facilities.

Extensions

Single Phase Extensions less than 1,000 feet under normal construction circumstances are based upon a unit cost per linear foot (**subject to change upon annual review**). Contact New Construction Center for current cost per foot.

New Construction Center

www.mnpower.com

1-877-535-0394 or 218-720-2644

newconstruction@mnpower.com

Extensions more than 1,000 feet are not based upon a unit cost per linear foot. Your Minnesota Power representative will calculate the cost of the extension based upon labor and materials.

Additional Costs

If conditions exist that impede the installation of your new service line, additional construction charges will be added to the standard unit cost per foot. These conditions, such as surface or subsurface impediments, may include, but are not limited to, frost, rock, subsurface structures, wetlands and underwater installations. Please be sure to keep us informed of any design or scheduling changes. Keep in mind, these changes may result in additional costs and/or delays.

Temporary Service Installation

Temporary service is defined in Minnesota Power’s Extension Rules as “service to a customer whose use of that service, in the company’s judgment, may be less than five years duration.”

A customer may choose to have a temporary service during the construction phase of the project. The customer provides the temporary service structure including, but not limited to, proper timber construction with sufficient bracing and approved meter socket. Temporary services should not be located closer than 10 feet from the Minnesota Power facilities (examples: pole, pad-mounted transformer).

Cover-up

The following are requirements of OSHA regulation sections 1926.416(a)(1) and 1926.550(a)(15).

1926.416(a)(1): Protection of employees. No employer shall permit an employee to work in such proximity to any part of an electric power circuit that the employee could contact the electric power circuit in the course of work, unless the employee is protected against electric shock by de-energizing the circuit and grounding it or by guarding it effectively by insulation or other means. (This requires a minimum clearance of 10 feet for lines rated 50 kV or less).

1926.550(a)(15): Cranes. Except where electrical distribution and transmission lines have been de-energized and visibly grounded at point of work or where insulating barriers, not a part of or an attachment to the equipment or machinery, have been erected to prevent physical contact with the lines, equipment or machines shall be operated proximate to power lines only in accordance with the following (i) For lines rated 50 kV or below, minimum clearance between the lines and any part of the crane or load shall be 10 feet.

It is the responsibility of the contractor to contact Minnesota Power to provide cover-up.

Contact the central dispatch area for scheduling and fee schedule at 218-720-2757.



Right-of-way Easements, Permits or Licenses

Minnesota Power’s Extension Rules require customers to provide “satisfactory **right-of-way** necessary for the construction, operation and maintenance of the extension (including any tree-trimming rights) both for the purpose of providing access to the extension on the customer’s premises and for continuing the extension to other customers, has been furnished without expense to the company” (Extension Rules, Section 8, Paragraph 3).

Providing satisfactory “**right-of-way**” requires that we have a general understanding of the term to mean “**a strip of land used by a utility company and others AND the right to pass over the land of another.**”

- Right-of-way involves “land,” both **public** land and **private** land.
 - **Public land**—involving streets, roads, highways, forest lands, wetlands, lakes, rivers, streams and trails—will (almost always) require either a permit or a license.
 - **Private land**—involving commercial and rural property, including railroad and mining property—can require an easement and, on occasion, require a license.
- Right-of-way involves (primarily) three forms of legal documentation:
 - **Easement**—a written document giving one party (grantee) the right and privilege to use the land of another (grantor) for a special purpose.
 - **Permit**—a written document giving one party (permittee) permission and personal privilege to do some act on the land or right-of-way of another (permitter), usually for an unspecified duration of time (no term) and for a fee.
 - **License**—a written document giving one party (licensee) permission and personal privilege to do some act on the land or right-of-way of another (licensor), usually for a specified duration of time (term) and for a fee.

Your Minnesota Power representative will help determine if the line extension will affect public or private land and identify the legal document that will be necessary in order for Minnesota Power to extend electric service to your business. All expenses or costs involving right-of-way (acquisition of easements, permits or license) will be paid by the customer.

Utility Easement Restrictions

Minnesota Power suggests that easements remain clear of any obstructions that will make it difficult to maintain or replace the existing facilities. Keeping utility easements clear helps utility companies perform routine maintenance (e.g., replace a pole), construct improvement projects (e.g., install a new sanitary sewer), and repair utility lines during emergencies (e.g., remove a tree which has fallen on a power line during a lightning storm). Minnesota Power will make an effort to limit damage to landscaping; all damages to landscaping located within the boundaries of the utility easement are the responsibility of the landowner.

Residential Programs

Dual Fuel

The Dual Fuel interruptible service rate is designed for electric heating. To qualify for this rate, you must have a nonelectric backup heating system. The Dual Fuel system consists of an electric service entrance and panel connected only to your electric heating equipment. This separate electric service for heat has its own meter and switch that is controlled by Minnesota Power. During times when demand on Minnesota Power's electric system is high or to perform necessary interruption tests, we can interrupt your Dual Fuel service. When this happens, your nonelectric backup heating system must be capable of meeting your heating needs. Your backup heating system must be capable of providing all of your heating needs up to 30% of any annual period. Electric service for your other appliances is not affected.

Conditions:

Electric heating systems can be convective baseboards, wall heaters and radiant slabs or ceilings, furnaces, plenum heaters, boilers and heat pumps.

Backup heating systems can be fueled by oil, wood, propane or natural gas. The backup system must be capable of continuous automatic operation to meet your total space or water heating needs. The homeowner will receive a Dual Fuel heating agreement and the tax-exempt card after the meter is installed (all heating fuels in the state of Minnesota are tax exempt).

How to Participate:

Call Minnesota Power at 218-720-2644 for more information on the Dual Fuel program.



Controlled Access Storage Heating Rate

The Storage Heating rate is designed around the ability to store energy for space and water heating. During off-peak hours from 11 p.m. to 7 a.m., when the cost of electricity and system demand is less, storage heating equipment turns on and stores the energy needed for the balance of the day. A storage system can consist of thermal storage room units, a central storage furnace, a central hot water system or slab heat. Water heating on the storage rate generally requires a minimum of one 80-gallon electric water heater or two 52-gallon electric water heaters. Larger combinations may be necessary depending on hot water demand. Electricity to energize the heating equipment is on only between 11 p.m. and 7 a.m. This system is also known as controlled access or “ETS” (electric thermal storage).

Conditions:

To qualify for the Controlled Access rate, you must have sufficient storage capacity to meet your building’s space or water heating needs. The homeowner will receive a Controlled Access Agreement and the tax-exempt card after the meter is installed (all heating fuels in the state of Minnesota are tax-exempt).

How to Participate:

Call Minnesota Power at 218-720-2644 for more information on the Controlled Access program.

Triple E New Construction

The Triple E New Construction program is based on the concept of the “House as a System” and promotes energy-efficient construction and design through specific thermal and performance standards. Triple E stands for Energy Efficiency, Education, and Evaluation. By working in partnership with homeowners, builders, architects, suppliers and manufacturers, Triple E helps improve the energy efficiency of new residential homes.

Homeowners and builders can qualify for special incentive rebates by meeting specific energy standards. These standards cover thermal integrity (insulation, windows and doors, exterior wind barriers), airtight construction, moisture control, and ventilation and heating performance for air and water. Homes built to meet Triple E standards provide the homeowner with lower energy costs, a healthier indoors, improved building durability and increased market value.

Incentives and rebates are available for meeting all thermal and prescriptive standards. Refer to the Triple E New Construction Guide available from Minnesota Power for more details.

Conditions:

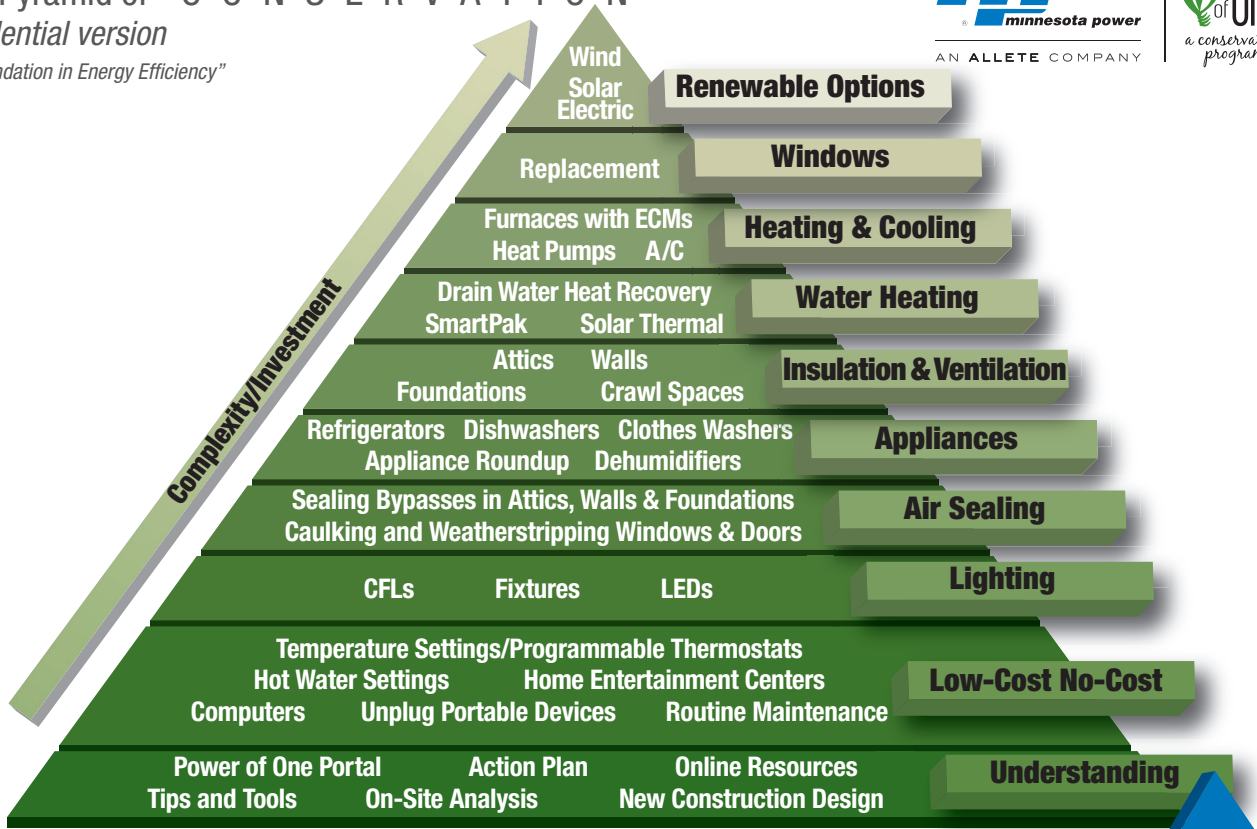
1. Open to all residential new construction built in Minnesota Power’s service area.
2. The building must have some form of electric heat as the heating source.
3. Maximum of four units per dwelling.

How to Participate:

Visit our website at www.mnpower.com/triplee or contact us at 218-355-2206 for more information on the Triple E New Construction program.

Minnesota Power's Energy-Saving Tools and Information

The Pyramid of CONSERVATION
residential version
 "A Foundation in Energy Efficiency"



www.mnpower.com/powerofonehome

Copyright © 2008, 2011 Minnesota Power, an ALLETE Company, All Rights Reserved.



Conservation – where do I begin?

The choice to be more energy efficient may be clear, but the starting point can be more difficult to determine. One of the best ways to answer the question “Where do I begin?” is by first understanding how you use energy and then learning more about the options available to you. Throughout the Power of One® Web site, Minnesota Power provides a number of tools, references and calculators to help you prioritize steps and develop and implement an action plan that’s right for you.

Visit our website at www.mnpower.com/PowerofOne or call 218-355-2842, for more information about our programs, rebates and tools.



Installation Of Minnesota Power Electric Service

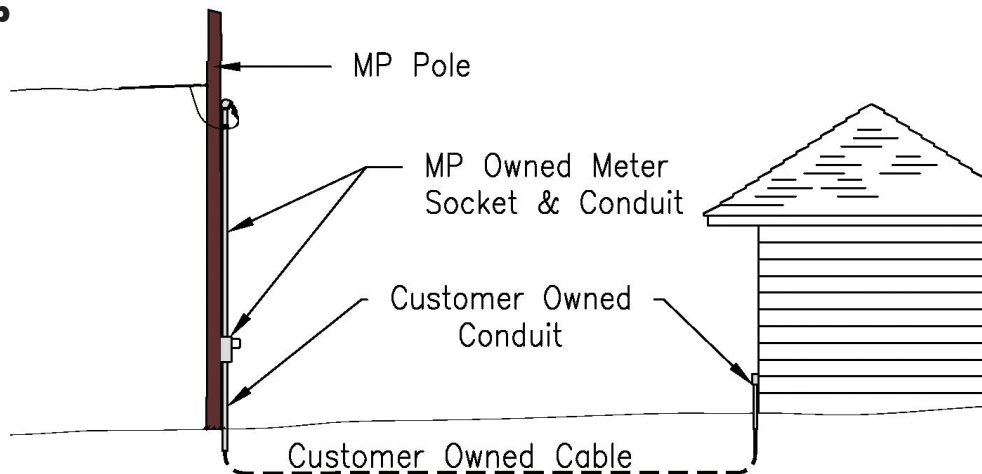
Your site will be reviewed to determine the nearest power source and meter location options for the installation of your new electric service. Unless customer voltage needs cannot be met, Minnesota Power distribution facilities will be located as far as 300 feet from your electrical service panel. Minnesota Power facilities will be located in a truck-accessible location to ensure ongoing access for maintenance. Design and installation of Minnesota Power facilities will be determined by Minnesota Power personnel and will be constructed according to Minnesota Power Engineering Standards and the National Electrical Safety Code (NESC).

Overhead Installation

Lot Line Metering—Company Standard

With lot line metering, company-provided meter enclosure on a company owned pole will be located at the lot line or in close proximity of Minnesota Power facilities. Your contractor can connect customer owned underground cable to the meter enclosure to provide you temporary construction power. Minnesota Power’s lot line metering enclosures have a capacity of 200 amperes and provide connecting lugs for three sets of conductors; however, they do not provide space for individual breakers. You and/or your electrical contractor will need to arrange for an outdoor weatherproof load center, GFCI breakers or GFCI outlets and grounding for temporary service. Minnesota Power’s point of service is at the bus work on the load side of the breaker. The customer and/or electrical contractor is responsible for sizing, purchasing, installing and maintaining material from Minnesota Power’s meter enclosure to the customer’s electrical service equipment.

Meter Loop



Meter enclosure on power pole



Meter enclosures on power pole

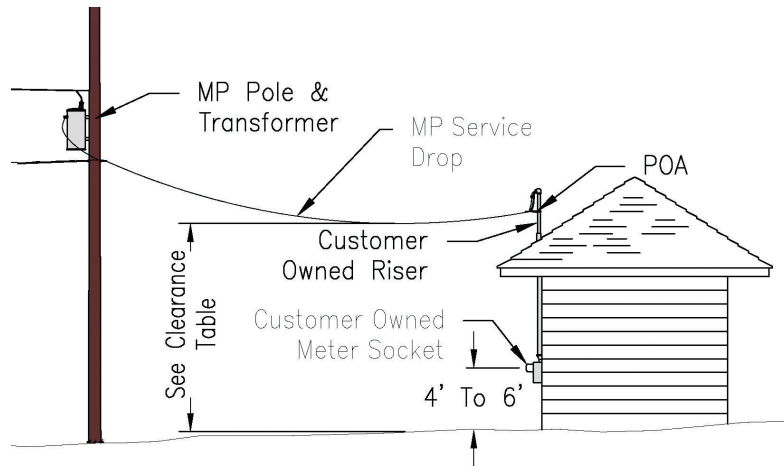
If your Minnesota Power representative has determined that lot line metering is not appropriate for your installation, the following options may be applicable.

Overhead Installation Where Lot Line Metering is not Applicable

Overhead installation is the overhead electrical power line from Minnesota Power’s utility pole to your meter location. The customer is responsible for sizing, purchasing, installing and maintaining the meter enclosure, riser pipe, weatherhead and Point of Attachment (POA).



Overhead service drop



Types of Point of Attachment (POA)

When multiple conduit risers or service masts are installed to support a single electric entrance, it is the customer’s responsibility to provide the connector that ties the customer’s conductors (wires) together and allows for a single point of connection to Minnesota Power’s conductors.

Clearance Table	
Over street, alley, public roadway, parking lot, drive-in, commercial, industrial and farm areas	16’ minimum
Over residential driveways	15’6” minimum
Over areas accessible to pedestrians	12’ minimum

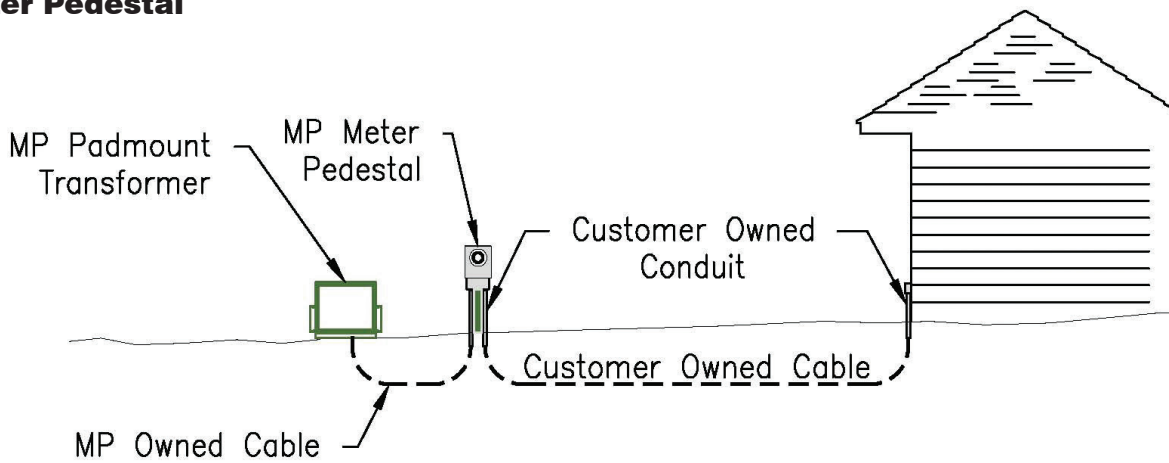
Minnesota Power’s connectors at the Point of Attachment (POA) shall meet National Electrical Safety Code (NESC) minimum clearance. All customer owned equipment shall meet any applicable National Electric Code (NEC) requirements. A Minnesota Power representative will work with your electrical contractor to meet all national clearance requirements and applicable local and state codes.



Underground Installation
Lot Line Metering—Company Standard

With lot line metering, company-provided meter enclosure on a pedestal located at the lot line or in close proximity of Minnesota Power facilities, your contractor can connect to the meter enclosure to provide you temporary construction power. Minnesota Power’s lot line metering enclosures have a capacity of 200 amperes and provide connecting lugs for three sets of conductors; however, they do not provide space for individual breakers. You and/or your electrical contractor will need to arrange for an outdoor weatherproof load center, GFCI breakers or GFCI outlets and grounding for temporary service. Minnesota Power’s point of service is at the bus work on the load side of the breaker. The customer and/or electrical contractor is responsible for sizing, purchasing, installing and maintaining material from Minnesota Power’s meter enclosure to the customer’s electrical service equipment.

Meter Pedestal



Pad-mounted transformer with lot line meter pedestal



Secondary pedestal with meter pedestal

If your Minnesota Power representative has determined that lot line metering is not appropriate for your installation, the following options may be applicable.

Underground Installation Where Lot Line Metering is not Applicable

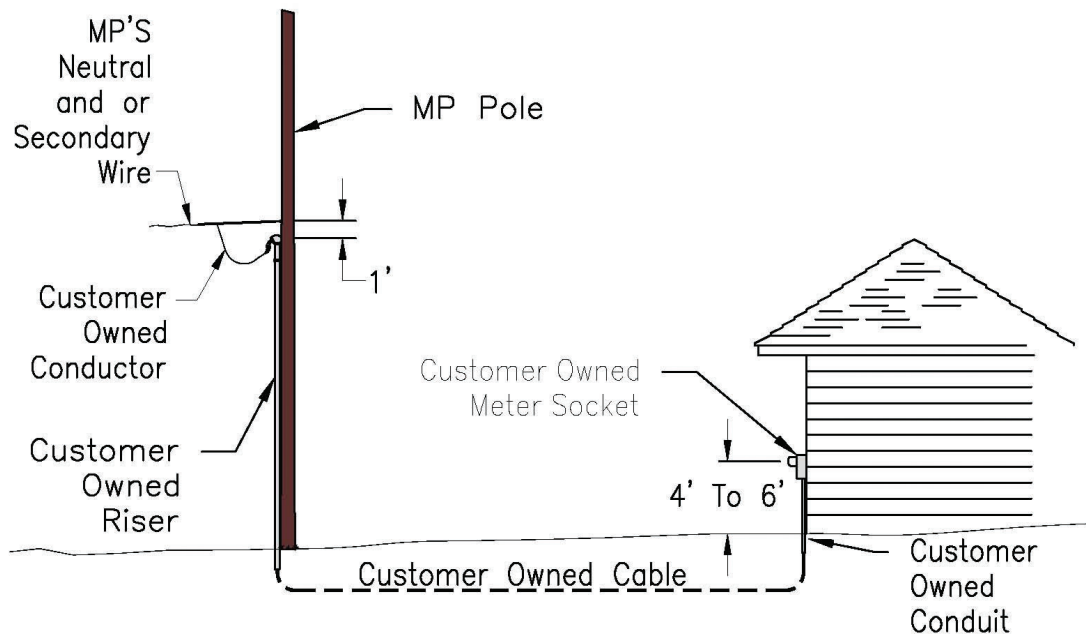
The customer is responsible for sizing, purchasing, installing and maintaining the underground conductor (cable), meter enclosure, conduit, weatherhead (if applicable) and all other associated material needed from customer's electric service equipment to Minnesota Power's point of service.

Connecting to Pole-mounted Facilities

When connecting customer-owned underground service cable to Minnesota Power's pole-mounted transformer(s) or secondary wires, the customer will provide, own and maintain the cable, conduit for the riser, steel straps and weatherhead that will be mounted on the pole. Mounting height for weatherhead shall be one foot below Minnesota Power's neutral position. The conductor shall be brought to the base of the pole and assembled as follows:

Minnesota Power personnel in conjunction with the customer shall jointly install the riser(s) and secure it (them) to the pole. Minnesota Power personnel will connect* the customer-owned service wires as appropriate.

**When multiple risers or service masts are installed to support a single electric entrance, it is the customer's responsibility to provide the connector that ties the customer's conductors together and allows for a single point of connection for the Minnesota Power conductors.*



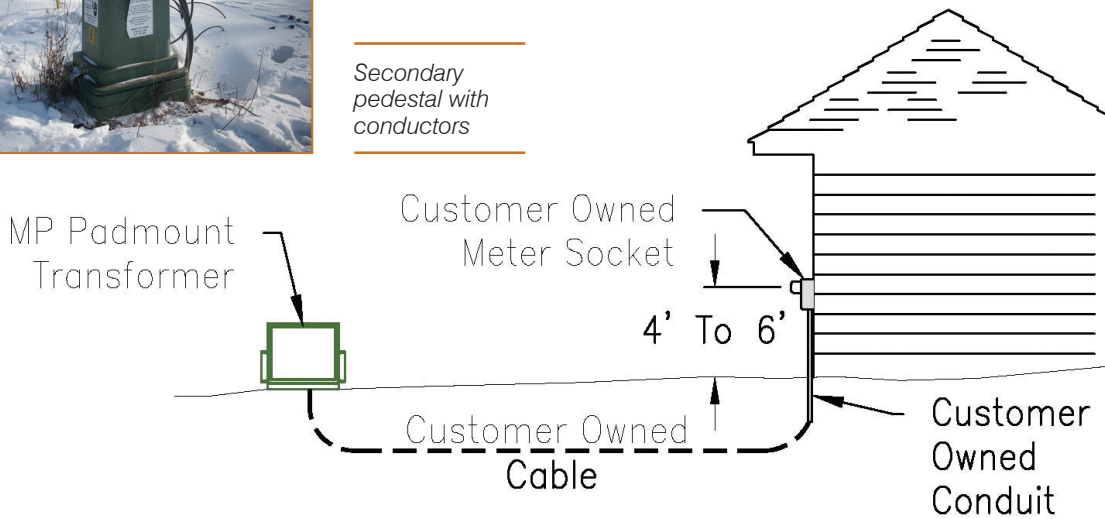


Connecting to Ground-mounted Facilities

When connecting private underground service cable to Minnesota Power’s ground-mounted facilities, the customer will provide, own and maintain the cable.



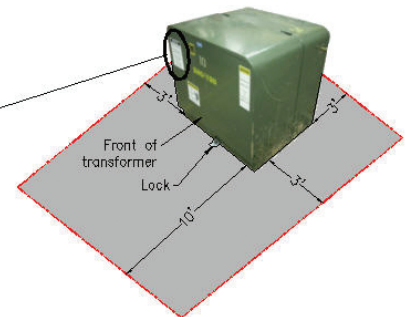
Secondary pedestal with conductors



The customer shall dig and install private underground service cable to within one foot of any side of the secondary pedestals or the front right side (the front is the side where the lock is located) of a pad-mounted transformer, leaving a minimum of six feet of cable above ground for connection purposes. In conjunction with customer, Minnesota Power personnel will dig the remaining trench length, dig under the transformer or secondary pedestal and connect the cable to the transformer or secondary pedestal.



NOTICE
 WE NEED ROOM TO WORK SAFELY ON THIS DEVICE
 PLEASE KEEP SHRUBS AND STRUCTURES 10 FEET AWAY FROM THE SIDE WITH DOORS AND 3 FEET AWAY FROM THE OTHER SIDES
 OBSTRUCTIONS MAY BE DAMAGED OR REMOVED DURING SERVICE RESTORATION OR MAINTENANCE
 MINNESOTA POWER
 1-800-228-4966
 218-722-2641



Front side of pad-mounted transformer with lock

Meter Requirements

Bypass Metering Requirements If Lot Line Metering is Not Used



In order to minimize power interruptions during meter replacement or calibration, and to ensure safety of Minnesota Power employees, all residential, customer-owned, self-contained meter sockets must have a jaw-clamping, lever-type bypass.

Horn-type bypasses are not acceptable bypasses.

Self Contained Metering

200-Amp Single-Phase 3-Wire—4 or 5 terminal, 200-amp, jaw-clamping, lever-operated bypass, weatherproof, ringless, 5th jaw at nine o'clock position, hub opening for overhead, closure plate or plain top for underground.

320-Amp Single-Phase 3-Wire—4 terminal, 320-amp, jaw-clamping, lever-operated bypass, weatherproof, ringless, hub opening for overhead, closure plate or plain top for underground. Anti-inversion clips in the upper right jaw are not allowed.

200 Amp 2 Position Single Phase 3 Wire—4 terminal, weatherproof, 200-amp jaw-clamping, lever-operated bypass per position, ringless, hub opening for overhead, closure plate or plain top for underground.

Approved Meter Sockets—List of Manufacturers

Landis and Gyr, Milbank, T&B, Anchor, Durham, Siemens, Square D, Cutler Hammer and Midwest Electric are examples of UL approved metering equipment providers.

**Note: Metering services greater than 320A and in excess of 240V require instrument-rated metering equipment.*

Meter Location

Outdoor metering is required for all installations unless prior approval is given.

- For outdoor installations the center line of all meters shall be between four and six feet from the finished grade.
- A minimum three feet of unobstructed working space, as measured from the surface on which it is mounted, should be maintained in front of the meter, and a minimum of 12 inches of unobstructed space should be maintained on all sides of the meter cover. Ample space shall be provided for all meters, metering equipment and other apparatus so that they can be safely read, inspected and tested.

Please call Minnesota Power's Meter Department at 1-800-228-4966 or 218-355-2516 for questions regarding sockets.

**Note: Your local or state electrical code may have additional requirements.*

Temporary Metering Requirements

Minnesota Power will allow non bypass for temporary service installation of less than one year duration.



Outdoor and Area Lighting

Leasing outdoor lighting from Minnesota Power is quick, easy and economical. You can select an area light, which gives you a wide circle, or a floodlight to direct the illumination in one direction. Minnesota Power will install, replace and maintain your outdoor and area lighting service. The customer will agree to rent the area lights and necessary poles for a minimum of six months.

Contact Minnesota Power at 1-877-535-0394 or 218-720-2644 for information on outdoor and area lighting services. *If interested, complete form 4789.*

Options for lighting

High Pressure Sodium	Metal Halide
8,500 lumen area light (100-watt)	17,000 lumen floodlight (250-watt)
14,000 lumen area light (150-watt)	28,800 lumen floodlight (400-watt)
23,000 lumen area light (250-watt)	88,000 lumen floodlight (1000-watt)
23,000 lumen area floodlight (250-watt)	
45,000 lumen area floodlight (400-watt)	

Depending on the customer's needs, there may be a pole rental fee associated with the installation.

Scheduling

A well-prepared application and site, along with good communication with your Minnesota Power representative, is the best way to keep your project on track. The amount of time it takes to complete the installation depends on a variety of factors. The work order will not be released for scheduling until all required items on the checklist have been received. A minimum of two weeks should be expected before the work will begin. Weather, changing site conditions, pending service work already scheduled, extent of work to bring supply lines to property, restrictions such as permits and right-of-way, and other unforeseen circumstances all may delay progress.

Scheduling questions can be directed to your local Minnesota Power representative and/or Minnesota Power central dispatching area at 218-720-2757.

Please have the main breaker at the service panel turned off to ensure the safety of Minnesota Power field personnel when energizing your service.



Application Forms



Instruction for Completing the Application Form

Below are detailed instructions for completing each section of the application. If you have questions after reading this information, please call the New Construction Center at 1-877-535-0394 or 218-720-2644.

Contact and Billing Information

Please provide the name of the person that we can speak with about the details and coordination of your project. Also provide the name and/or names of the person that will be billed for the kilowatt hour usage once the electric meter has been installed.

Project Location

Please provide the address (i.e., 123 Main St, Anytown, MN) of your site as listed on your building permit. If you do not have an address, contact the county where your building site will be located.

County Web site addresses:

Beltrami.....	http://www.co.beltrami.mn.us	Lake.....	http://www.co.lake.mn.us
Cass.....	http://www.co.cass.mn.us	Otter Tail.....	http://www.co.otter-tail.mn.us
Carlton.....	http://www.co.carlton.mn.us	Pine.....	http://www.co.pine.mn.us
Crow Wing.....	http://www.co.crow-wing.mn.us	St. Louis.....	http://www.co.st-louis.mn.us
Hubbard.....	http://www.co.hubbard.mn.us	Stearns.....	http://www.co.stearns.mn.us
Itasca.....	http://www.co.itasca.mn.us	Todd.....	http://www.co.todd.mn.us
Koochiching.....	http://www.co.koochiching.mn.us	Wadena.....	http://www.co.wadena.mn.us

US Postal Service <http://usps.whitepages.com>

If you have difficulty in receiving an address, please provide us the nearest neighboring address and a legal description, including a parcel number.

Project Timeline

Minnesota Power will make every effort to meet your project deadline. Please provide us the date that you need the electric power installed. An actual date is required in this field (ASAP or Immediately are not considered valid dates). Remember that we are usually scheduled out two to four weeks and that it takes time to process your request.

Service Specifications

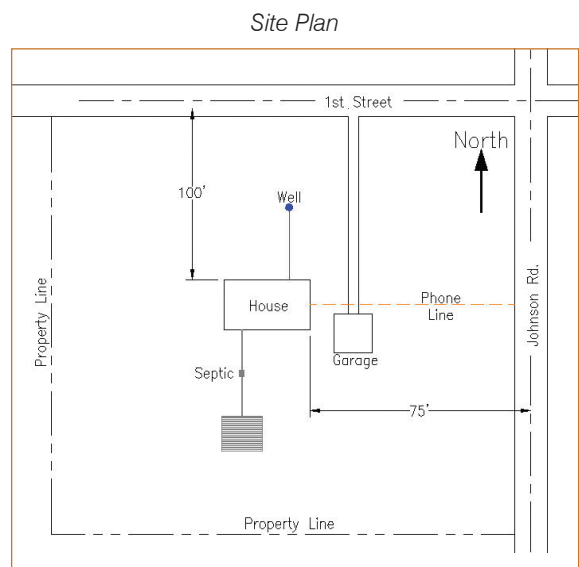
This is the most crucial portion of your request. For Minnesota Power to design the installation of facilities, we need to know your electric load requirements. Please have your electrical engineer or electrician provide you this information. If we do not have the correct information additional time, labor and costs could become an issue.

Authorization

A signature (or an electronic signature) is required to move forward with your project.

Certified Map or Site Plan

Please provide a certified survey map. If a survey map is not available, please provide a detailed sketch showing property lines, existing structures, proposed structures, any private underground facilities (i.e., well, septic, private underground power to other structures, etc.), setbacks, distance of all structures from property lines, overall dimensions of all structures and proposed work.





CONSTRUCTION REQUEST – RESIDENTIAL

Contact Information

Name:

Last _____ First _____ Middle _____

Contact Role _____ Company _____

Daytime Phone: Area Code _____ Number _____ Extension _____ Comments _____

Cell: Area Code _____ Number _____ Extension _____ Comments _____

Fax: Area Code _____ Number _____ Extension _____ Comments _____

Email: _____

Mailing Address:

Address _____

Apt/Ste. Nbr. _____

City _____ State _____ Zip Code _____

Billing Information

Existing Minnesota Power Customer? yes no Existing Account Number _____

Name:

Last _____ First _____ Middle _____ Employer _____

Additional Name:

Last _____ First _____ Middle _____ Employer _____

Billing Address:

Address _____

Apt/Ste. Nbr. _____

City _____ State _____ Zip Code _____

Primary Phone: Area Code _____ Number _____ Extension _____ Comments _____

Daytime Phone: Area Code _____ Number _____ Extension _____ Comments _____

Cell: Area Code _____ Number _____ Extension _____ Comments _____

Fax: Area Code _____ Number _____ Extension _____ Comments _____

Email: _____

Project Location:

Address _____

Apt/Ste. Nbr. _____

City _____ State _____ Zip Code _____

If multiple-unit building, number of units _____

Nearest cross street/road or closest neighbor's address _____

Legal Description Plat Name _____ County _____

Lot Number _____ Range _____

Block Number _____ Section _____

City/Twp Name _____ 1/4 Section _____

Twp Number _____ Parcel _____

CONSTRUCTION REQUEST—RESIDENTIAL

Project Information:

Building Type:

- Cabin
- Construction Trailer
- Factory-built Structure
- Garage
- Pole Building
- Camper
- Existing Home—Extensive Remodelling
- Frame Construction
- Mobile Home
- Other _____

Current Construction Status:

- No Start
- Excavated and Backfilled
- Finishing
- Ready for Minnesota Power
- Framed
- Capped Basement
- Driveway In

Who should be billed for electric usage during construction? _____

Customer Construction Start Date _____ Electric Target Install Date _____

Are any members of your household on life support equipment that relies on electrical service? Yes No

	General Contractor	Electrical Contractor	Architect (A&E Firm)	Mechanical Contractor
Company				
Contact Person				
Phone Number				
Fax Number				
Email				

Service Specifications

Are you installing electric heat? yes no undecided

Electric Heating Program Options:

- Dual Fuel (interruptible)—can be interrupted 30% of an annual season and requires a non-electric backup heat source
- Controlled Access (storage)—requires a sufficient storage medium—receives energy 8 hours per day from 11:00 pm–7:00 am
- Storage Water Heat Only—requires a sufficient storage water heater—receives energy 8 hours per day from 11:00 pm–7:00 am

Are you planning to take advantage of any of the above electric heating options?

- Controlled Access (Storage)
- Dual Fuel (Interruptible)
- Controlled Access (Storage Water Only)
- Dual Fuel and Controlled Access

Electric Heating System

- Air Source Heat Pump
- Baseboard/Wall Heaters/Cove Heaters
- Electric Boiler-Hot Water Baseboard
- Slab Heat-Electric Cable
- Electric Plenum
- Ground Source Heat Pump _____ tons
- Central Storage Hot Water System
- Centrally-Ducted Storage Furnace
- Slab Heat-Electric Boiler
- Thermal Storage Unit Heaters
- Other _____

Electric Heat Load:

Total Wattage ÷ 1000 = _____ kW

Non-electric Fuel Source

- Fuel Oil
- Propane
- Other _____
- Natural Gas
- Wood

Electric heat panel size

- 60 amps
- 125 amps
- 200 amps
- Other _____
- 100 amps
- 150 amps
- 320 amps

Non-electric Heating System

- Boiler-Hot Water Baseboard
- Fireplace/Stove
- Other _____
- Boiler-Slab Heat
- Forced Air Furnace

CONSTRUCTION REQUEST—RESIDENTIAL



Temporary Service

Panel Size

- 60 amps
- 125 amps
- 200 amps
- Other _____
- 100 amps
- 150 amps
- 320 amps

Single Phase Voltage 120/240 120/208 (network)

General Service

Panel Size

- 60 amps
- 125 amps
- 200 amps
- Other _____
- 100 amps
- 150 amps
- 320 amps

Single Phase Voltage 120/240 120/208 (network)

Comments:

Return Instructions

Send your completed application and site plan by:

Mail: Minnesota Power—New Construction Center
PO Box 1001
Duluth, MN 55806-1001

Fax: 218-720-2795

Email: newconstruction@mnpower.com

Any questions can be directed to the New Construction Center at 1-877-535-0394 or 218-355-2644.

Minnesota Power Web site: <http://www.mnpower.com>

Authorization

Signature _____ Date _____

Printed name _____

CONSTRUCTION REQUEST – RESIDENTIAL



Certified Survey Map or Site Plan

Customers must provide a certified survey map or a detailed site plan noting the following:

- Where the new structure will be located
- Location of existing structures
- Distance (feet) structure will be located from roadway
- Location of proposed/existing driveway (note if matting has been installed)
- Location of well lines, sewer lines, or other potential obstructions
- Location of electric panel (service entrance)
- Neighboring address and/or nearest intersecting road

West

East

A large, empty rectangular box with a thin black border, intended for the user to draw a certified survey map or a detailed site plan. The word "West" is printed vertically on the left side of the box, and the word "East" is printed vertically on the right side.



Outdoor & Area Light Agreement

The customer agrees to rent Area Light(s) and any pole(s) indicated below for a minimum of six months and authorizes Minnesota Power to charge for them according to the applicable rate schedule and electric service regulations. Monthly charges will be as shown below, plus any applicable taxes and plus or minus any authorized adjustment for the cost of generation fuel, unless superseded by different rates approved by the Minnesota Public Utilities Commission.

Work Order Number

Minnesota Power will install the light(s) indicated on an existing pole or poles that it owns unless the customer requests that it be placed where no pole exists, in which case Minnesota Power will set the necessary pole or poles for the additional charge indicated below, plus applicable taxes and adjustments.

Account Number

Minnesota Power will be responsible for the customary and usual costs of extending electric service to a light. Any costs beyond that amount will be the responsibility of the customer and will be communicated in advance.

Maintenance, lamp replacement and electricity for operation of the light will be provided by Minnesota Power as specified in its Area Lighting Rate Schedule.

All lamps are high-pressure sodium or metal halide type. The terms stated are offered to Minnesota Power customers only.

HIGH PRESSURE SODIUM				
Code	Description	Monthly Charge	Qty.	Total
I	8,500-lumen area light (100-watt)	\$10.19		
X	14,000-lumen area light (150-watt)	\$11.73		
J	23,000-lumen area light (250-watt)	\$16.65		
G	23,000-lumen floodlight (250-watt)	\$16.65		
Z	45,000-lumen floodlight (400-watt)	\$22.22		
METAL HALIDE				
R	17,000-lumen floodlight (250-watt)	\$16.44		
S	28,800-lumen floodlight (400-watt)	\$20.12		
U	88,000-lumen floodlight (1000-watt)	\$33.39		
6	Pole	\$ 4.70		
			Total	

Minnesota Power Representative

Customer Name (Print)

Customer Address

City State Zip

Daytime Phone

Customer Signature

White – Office copy
Canary– Customer copy

Call Numbers

New Construction Center

Toll-Free Area Wide	1-877-535-0394
Duluth Area	218-355-2644
Outside Duluth Area	218-720-2644

24-hour Customer Service and Questions About Your Bill

Toll-Free Area Wide	1-800-228-4966
Duluth Area	218-722-2625

Lights Out

24-hour Automated Outage Reporting	1-800-30-POWER (1-800-307-6937)
--	---------------------------------

Automated Meter Reading Reporting	1-888-30-METER (1-888-306-3837)
--	---------------------------------

Shareholder Services

Toll Free Area Wide	1-800-535-3056
Duluth Area	218-723-3974

TTY/TDD

(Hearing Impaired Customer Service)	1-800-367-3180
---	----------------

ALLETE	218-279-5000
---------------------	--------------



CHECKLIST

Please keep for your records

Date _____

Minnesota Power Contact _____ Phone # _____

This checklist will help you make sure the necessary paperwork is completed and your job stays on track.

Before Minnesota Power can begin design and construction on your project, the following items need to be completed.

- 1. A determination that your property is in our service territory.
- 2. Contact Minnesota Power’s Land Management department at landinfo@mnpower.com if you are building on Minnesota Power leased land to obtain the proper forms for constructions.
- 3. Proof of ownership with one or more of the following: title report, recorded warranty deed or real estate contract, a copy of your assessor’s map and/or survey, or short plat, and the name and address of the person(s) authorized to sign for right-of-way.
- 4. The address of your site. This may be listed on your building permit or may be obtained from the county your residence will be located in.
- 5. With the assistance of your Minnesota Power representative, gather all necessary right-of-way documents, easements, permits or licenses.
- 6. A completed and returned Residential Construction Request application (including all other service request forms, (ie., heating and cooling, rebates, etc.).
- 7. A sketch of site plan or certified survey map.
- 8. Contact your Minnesota Power representative to schedule an on-site meeting and to approve site preparation. Contact information will be provided to you once your application has been processed.
- 9. Provide a copy of the state electrical inspection or receipt of a city electrical inspection if the project is in Duluth, Hoyt Lakes or Biwabik.
- 10. Determine location of private underground facilities.
- 11. Make payment to Minnesota Power as quoted by your Minnesota Power representative.
- 12. A review of our heating options: Dual Fuel (Electric Heating Options) and Controlled Access/Storage Heating.
- 13. A review of our energy-efficient programs and rebate programs. Visit www.mnpower.com/powerofone.

****Important: Please have the main breaker turned off at the service panel to ensure the safety of our field personnel when energizing your service.***

Any deviation from the electrical design, once established, may result in additional costs for redesign and delays in construction. It is the customer’s responsibility to provide all the necessary Minnesota Power requirements and specifications to subcontractors.

