



Cass County Electric  
**Cooperative**

New Residential Services  
**Handbook**

# Welcome!

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At Cass County Electric Cooperative (CCEC), we would like your new home construction to be a positive, safe, and seamless experience. This handbook is provided to you to assist with any questions regarding bringing power to your new home. This handbook can also be used as a guide for builders and electrical contractors. It contains information and general specs about the supply and use of electricity through CCEC.

This handbook is based on utility standards to guide you through the basic requirements for installing a new service and is not meant to be a design tool. CCEC suggests using only qualified electrical contractors who know and understand the NEC (National Electrical Code) and are familiar with CCEC policy and NESC (National Electrical Safety Code) requirements. You can find a list of - and links to - these policies at the end of the handbook. Please call us at 701-356-4461 if you have any questions after reviewing this material.

We look forward to serving you and your energy needs now and into the future.

## About Us

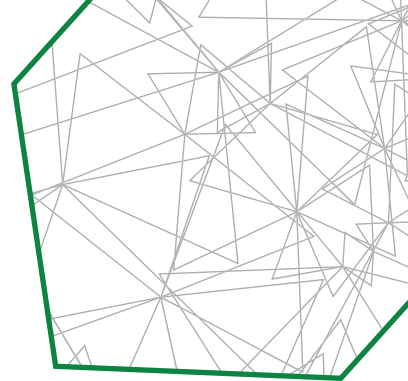
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CCEC is an electric distribution cooperative serving more than 55,000 members in a 10-county area in southeast North Dakota. We are part of the Minnkota Power Cooperative system of cooperatives. Once you sign up and establish service, you become a member of CCEC.

CCEC is locally owned and governed by the members we serve. We are a community-focused, not-for-profit organization working to provide affordable, reliable, and safe energy to our members.

- Any excess revenue is given back to our members in the form of capital credits.
- We are led by members like you who understand and listen to the community.
- We were built by the members and communities we serve.
- We are your trusted energy advisors.





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# Getting started - New residential services

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Building a new home is exciting. But it can also be overwhelming. This handbook can help make supplying electricity to your home as seamless as possible. This process is broken down into four phases:

1. Application for service
2. Pre-construction and temporary power
3. Trenching
4. Permanent power

## Phase 1 - Application for service

Once you've decided to build a home, picked out a lot, and chosen a builder - it's now time to think about utilities. If you have not had service with us before, the first thing to do is fill out an application for service. An application for service can be filled out by going online to [CassCountyElectric.com](http://CassCountyElectric.com).

Once on our website, click on the "Request/Stop Service" tab and select the appropriate tab (for homeowners, it's the "Residential Membership Application" tab). Complete the application by filling in the required fields and clicking the submit button.

## What you need to know

After you have filled out an application and submitted it, there are some things you need to know before power can be connected. There are guidelines for installing the service and different costs for different services. Costs are outlined in our Aid to Construction on the "Contractor Information" page of our website.

To coordinate your new service installation please contact the CCEC Engineering department at 701-356-4461 or [engineering@kwh.com](mailto:engineering@kwh.com) as far in advance as possible to avoid delays.

## Phase 2 - Establishing temporary construction power

The second phase of bringing power to your home is a temporary service. Temporary service is any service utilized for a construction project, seasonal use, display, etc., that is not expected to continue beyond a year. There will be a new meter charge for each new service initiated.

You will want to establish temporary power when your builder is ready for construction. By now, you or your builder should have been in contact with an electrician who will take on the responsibility of setting the temporary service and wiring your home.

## Initiating temporary electric service

The first step in the temporary service process is for the electrician to submit a wiring certificate. The North Dakota State Electrical Board and CCEC require this in order to connect the temporary service. Below is an example of a wiring certificate.

Date <u>07/13/2022</u>	<b>Electrical Wiring Certificate</b>	Total Job Cost <u>\$0.00</u>
State of North Dakota		Calculated Fee <u>\$0.00</u>
County of <u>CASS</u>		No <b>734111</b>
Firm _____		
Firm Address <u>FARGO ND</u>		
I, _____, hereby certify that the electrical wiring and equipment described below was installed on the premises owner of _____ by me as a licensed and bonded electrician License No. _____		
City or Town <u>FARGO</u>	Street Address _____	State <u>ND</u> County of <u>CASS</u>
Township Number _____	Range _____	Section _____ Quarter _____
was done in strict compliance with all the provisions of chapter 43-09 of the North Dakota Century Code as amended and all the requirements of the State Electrical Board. Power Supplier <u>CASS COUNTY ELECTRIC COOP</u>		
INSTRUCTION: Describe fully the nature of work done or equipment installed. Description should enable anyone to determine what part of any electrical installation was installed at this time.		
WIRE NEW HOUSE.	Owner Phone # (H) _____ (W) _____ (C) _____	

Once the electrician has submitted a wiring certificate and the builder is ready to start construction, the electrician will visit the site and determine the appropriate feed point.

A temporary service is generally a post with an approved meter socket on either a self-supporting stand or a wooden post with outlets on it. Your electrician will install it near the feed point (see below). The temporary service should meet the requirements of a temporary installation concerning service drop clearances, metering, grounding, and safety per the National Electrical Code.

## Feed points for temporary services

CCEC provides underground electrical service in the cities of Fargo, West Fargo, and Horace. Most lots will be in a platted area of a subdivision with existing feed points (the point where temporary and permanent power will come from). Generally, no line extension will be needed to provide you with temporary power to build your home. Please visit one of our engineering personnel regarding the feed point location on your lot if you have questions.



# Types of feed points

There are three types of feed points. The electrician will need to utilize one of these available points on your lot to set up a temporary service.



## Stub up

This is a white PVC pipe with colored electrical tape at the top. This type of feed point is located within a few feet inside the lot's property line. The pipe is removed by CCEC crews, and the cable is connected to leads attached to the temporary meter socket.

## Pedestal

This is a small green box that is a junction point for low voltage cable. The temporary stand is set close to this box, generally on the property line of the lot being built on. Ensure that the temporary is on the correct side of the property line for the home's address. If it is on the wrong side, it will delay any construction on that lot.



## Transformer

This is a 4' x 4' green box that can also serve as a feed point. As with a pedestal feed point, the electrician sets the temporary on the correct side of the transformer on the lot that it will serve.



Once the temporary service is set, the electrician will contact our office at 701-356-4461 or [engineering@kwh.com](mailto:engineering@kwh.com) to have the power connected. If within the city of Fargo, the temporary service may also have to be inspected by Fargo electrical inspectors.



Scan here to download the CCEC app!

When the electrician contacts CCEC, they will need to provide the following information to connect the power:

- Homeowner or builder's name (the person responsible for Aid to Construction charges during the construction process)
- Address for the home
- Type of service (residential)
- Service size (if known)
- Name/business of electrician
- Wiring certificate number

Once we have that information, CCEC lineworkers will be sent out to energize the temporary service.

## Checklist for temporary service



### Application for service

Fill out online at [CassCountyElectric.com](http://CassCountyElectric.com) or in our office. The person who fills this out is responsible for the Aid to Construction fees and energy charges.



### Review Aid to Construction policy and cold weather charges

This can be found online at [CassCountyElectric.com](http://CassCountyElectric.com) under Programs and Services on the "Contractor Information" tab. Cold weather charges are listed on the Aid to Construction pamphlet.



### Line up an electrician to set up a temporary service

They must file a wiring certificate and have an inspection sticker if within the city of Fargo.



### Contact CCEC engineering to set up the connection

703-356-4461 or [engineering@kwh.com](mailto:engineering@kwh.com)


## Phase 3 - Trenching - Bringing the service wire up to the home

Once the temporary service is connected and construction has begun, here's what to expect in the construction phase of bringing electricity to your home.




**CASS  
COUNTY  
ELECTRIC**  
800-248-3292


**Site visits/staking - A CCEC residential engineering technician will begin checking the construction status of the home and, when ready, stake the route for trenching of the electric service with white flags. The house is considered "ready" once the foundation is backfilled.**



**Trenching - Once the site is staked, the work order will be released to the construction/installation line crew for trenching. The route must be clear of all equipment and building materials**



**Joint trenching - In 2014, CCEC began a joint trench venture with Xcel Energy to install both utilities in the same trench to save time, save money, and reduce site disruptions for contractors. If a joint trench is desired, gas and electric meter locations should be clearly marked on the foundation, be on the same side of the home, and be at least 3 feet apart.**



**Locates of existing utilities - The crew assigned to the job will be responsible for the ND One-Call for locates.**



## Phase 4 - Connecting service on the home - Permanent service

Once the service is trenched, the electrician will mount a meter socket on the home when the construction process is far enough along for them to do so. After the socket is mounted, the electrician should contact engineering at 701-356-4461 or [engineering@kwh.com](mailto:engineering@kwh.com) for permanent service. Make sure inspections and certifications are complete.

The meter socket location must follow current Aid to Construction guidelines and conditions of service. Here are some things to know about meter sockets and what is required:

- Use of a lever bypass is required, as well as an insulated brushing and slip joint.
- It is the responsibility of the electrician or member contractor to provide and install the meter socket at an approved location on the home. Please see the aid to construction guidelines and visit with the engineering department to obtain socket placement approval prior to construction.
- CCEC does not allow member-owned equipment to be mounted on CCEC equipment, such as poles, transformers, or junction boxes. This is due to the significant cost and liability associated with maintaining CCEC equipment.
- If your home design does not coordinate well with meter socket placement, talk to your electrician about alternatives in either relocating the service panel or alternative methods of serving the panel in the desired location.
- Meter sockets must be placed so that they are easily accessible by CCEC personnel. The center of the meter socket should be about 4-5 feet from the finished grade.
- Size - most services are 200 amp, 120/240 volt. See your electrician for your specific loading needs. Any service larger than 400 amp will need to be CT metered.
- The socket must be United Laboratories rated, approved for outdoor use, and weatherproof. (NEMA-3R)
- The socket must contain four meter jaws and one connection point for the neutral conductor.
- Make sure all unused openings are tightly sealed from the inside.
- Please review the current aid to construction costs as they are updated yearly.

### Other meter options

If the member does not wish to have a meter socket on the home, or the design of the home is such that it cannot be placed within CCEC guidelines, the member has the option of installing a customer-owned meter pedestal. This type of socket is a structure that supports the meter socket and connecting service cable. As stated, this device is owned by the member and installed by the member's electrician. Any cable installed beyond this point is member-owned and will not be covered by ND One-Call locate requests. An independent locator/electrician will need to be called to provide this service.

Fees and charges are explained in the conditions of service and Aid to Construction found on our website.

## Policies and procedures for residential services

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**Policy 302** - Electric service: Covers the availability, type, timeliness, technology, power quality, capacity, engineering, design/construction standards, and the limitations on responsibility.

**Policy 304** - Area coverage and boundaries extension of electric facilities: Covers line extensions, conversions and upgrades, extensions for distributed generation systems, system load limitations, load balancing and economic considerations, as well as cost reimbursements, financing line improvements, special facilities, irrigation, and at-risk facilities.

**Policy 305** - Application for electric service and membership: Covers the application and membership requirements.

**Policy 310** - Conditions of service: Sets forth the rules and regulations of providing service.

**Policy 311** - Charges for connection or transferring service: Covers the fees of transferring an existing service or establishing a new member on an existing service. \*Does not apply to new construction, which is covered under Aid to Construction.

**Policy 312** - Deposits and guarantees: Covers deposits that may be charged on certain types of services or conditions.

**Policy 318** - Metering of electric service: Outlines the basic requirements for installing and maintaining meters.

**Operating Procedure 210J** - Establishes safe working practices to ensure public and employee safety when energizing services.

**Operating Procedure 310A** - Conditions of service: Refers to rate schedules, special service requirements, motors, power quality, distributed and co-generation, disconnects, double throws, voltage and ampacity limitations and requirements, direct metered services, multiple metered services, instrument transformers, primary metering, mobile homes, etc.

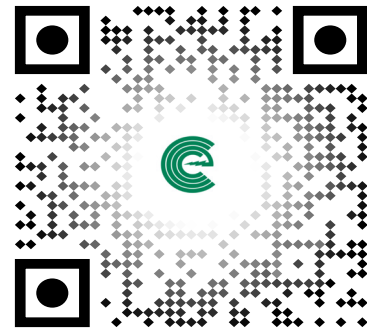
## Other important information

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Energy management - Off-peak program for homes with electricity as their primary heat source.

When electric demand and market electricity prices are high, an off-peak device in your home automatically switches from an electrical source to a backup source, such as propane or fuel oil. In exchange, participating members receive discounted off-peak rates, which are competitive with fuel oil and propane. The CCEC off-peak program reduces electric demand during peak times, saving you money.

Visit our website at [CassCountyElectric.com/energy-management](http://CassCountyElectric.com/energy-management) to see all our available energy management programs and incentives that can save you money. We can provide you with educational information and materials and work with you to make the right decision based on your needs and location.



Scan here to view our Aid to Construction guide

## Congratulations!

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If you follow the procedures outlined in this handbook, your service will have been installed safely and efficiently. We are here if you have questions regarding your new service after moving in. Best wishes on your new home!





800-248-3292 | CassCountyElectric.com  
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