

FAQ METERS

Lake Country Power's new Aclara meters



Lake Country Power is deploying a new metering system for all members, known as AMI which is an acronym for “automated metering infrastructure.” The pilot project started October 2018 north of Cloquet, where nearly 2,500 meters were changed out. When fully deployed, more than 67,200 meters will be replaced for all LCP members.



FREQUENTLY ASKED QUESTIONS ABOUT LAKE COUNTRY POWER'S NEW METERING PROJECT...

Why are the meters being changed out?

- The bulk of LCP's meters are reaching end-of-life. Cannon Technologies, the vendor of LCP's current metering system, no longer provides the necessary hardware needed to maintain the system into the future.
- The Aclara-Hubble AMI system will also be the new system used to control LCP's Energy Wise Programs (Off Peak, Dual Fuel, etc.). The current radio system (which has been in place for over 30 years) will no longer be supported by year-end 2025.
- The new meter system with Aclara-Hubble will reduce estimated bills by improving the number of meters that read on a regular basis.
- The new metering system will allow you to monitor your account, provides LCP the capabilities for pre-pay billing, read your meter from almost anywhere, and aid in outage restoration.

Who decided that LCP was getting a new metering system?

In December 2016, a 14-member AMI Selection Committee representing a cross-section of employees from all LCP departments evaluated each metering technology that's currently available on the market. The committee also visited other cooperatives to review various technologies before making a formal recommendation in December 2017. The AMI Selection Committee was unanimous in favor of Aclara-Hubble and the TWACS system. LCP's board of directors approved the committee recommendation in January 2018.

Who will be changing out the meters?

The majority of the meters will be exchanged by a contractor that Lake Country Power has hired named Allegiant Utility Services. Allegiant recently completed a similar meter exchange project with Beltrami Electric Cooperative in Bemidji, and is currently working on other meter installation projects with other co-ops around Minnesota.

When will the meters be changed and how long will it take to complete?

- September 2018: Grand Lake Substation north of Cloquet
- April-September 2019: Cohasset, Pokegama, Gunn, Arbo, Ball Club, Bena, Shoal Lake, Blackberry, Goodland, Hill City (western locations of LCP's service area)
- September-October 2019: Remer, Boy River, Longville, Onigum (western locations of LCP's service area)
- October-November 2019: Iron, Keewatin, Peary, Cotton (northern locations of LCP's service area)
- April-May 2020: Lakeland B, Lakeland A, Pike River, Sand Lake, Side Lake (northern locations of LCP's service area)

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Benefit: The new meter system with Aclara-Hubble will improve member service with outage reporting capabilities.



- May-July 2020: Cook, Potlatch, Meadowbrook, Orr, Frazer Bay, Vermilion (northern locations of LCP's service area)
- July-August 2020: Winton A, Winton B, Clear Lake, Babbitt (northern locations of LCP's service area)
- August-November 2020: Kettle River, Sturgeon Lake A, Sturgeon Lake B, Cromwell, Wright, Gowan, Round Lake, Big Sandy, Brandon, Solway, Bergen Lake, Cedar Valley (southeastern locations of LCP's service area).

How was it determined where the deployment started?

Various items went into developing the deployment schedule. The Grand Lake Substation was selected for the initial pilot deployment because it serves the majority of the load that the new Knife Falls Substation will take on — completed in October 2018.

Grand Lake also offers a good mix of meter types that mimics our meter installation mix as a whole across the entire Lake Country Power service territory. This substation is also centrally located within the Lake Country Power territory and aids in various employees being part and learning during the initial installation. Beyond the initial deployment, the determination on when meters get changed out is largely based on managing material and employees in the most efficient and economical manner.

Will I need to be home when my meter is changed?

No, the meter will be able to be changed out whether a person is home or not as long as the technician is able to safely access the meter. The technician will first knock on the door to

inform you that the meter is being exchanged. They'll leave a door tag behind informing you about the visit to your home if you are not present, to explain why they were there, and so that you know who's been on your property.

Will technicians need access to the inside of my home/cabin?

The technician will not need access to the inside of your home except for in the very rare cases when the meter is installed within a structure. The vast majority of meters are installed outside of the home and can be easily accessed by the technicians.

What happens if we have a locked gate into our property?

Lake Country Power employees will always require access to the power distribution equipment to be able to respond to outages and/or emergencies. As has been our practice in the past, if Lake Country Power does not have access to a locked gate, they will cut out one link in the chain on the gate and replace it with a Lake Country Power master lock. This will allow Lake Country Power employees access to our distribution equipment while maintaining your desire for privacy.

Will all of my meters be replaced? (general service and load management)

Yes, all the current electric meters will be replaced with new meters.

How will I know when my meter(s) are changed?

The technician will meet you at your door, if you're home, to inform you about the meter exchange. Otherwise they'll leave a door tag behind explaining what they did.

What are the benefits of the new meters?

The new meters will offer co-op members many benefits that may not necessarily be seen. These meters will be used to detect outages and improve response time. Estimated bills will be greatly reduced by utilizing a highly reliable communication technology. Members will also be able to view their usage on an hourly basis by using SmartHub.

Benefit: Estimated bills will be greatly reduced by utilizing a highly reliable communication technology.



How much money does this project cost?

The project investment as a whole will be \$14 million. This includes the new load management receivers that will be installed starting in late 2019, and continue towards 2025. Lake Country Power chose Aclara-Hubble because this is the vendor that best met the requirements for the new metering system. This vendor was also the lowest-cost solution.

Will there be any changes to my billing statements or bill due-dates?

There are no plans to change bill statements or bill due-dates at this time.

How will it affect a co-generation (renewable) account/meter?

From a billing perspective, co-generation meters will still be handled in a similar manner to how they are currently. These meters will be distinguished from other meters by having a blue label on the front, unlike the majority of meters which will have a white label.

Co-generation (co-gen) is the terminology used to reference members who generate a portion of their electricity from renewables, like solar or wind.

Why wasn't my meter changed out first when I am receiving estimated bills?

Lake Country Power tries hard to minimize and eliminate estimated bills for all members. This new metering system will go a long way in accomplishing that. It would be cost prohibitive to first exchange all meters that have caused estimated bills across our 11,000 square mile territory.

Lake Country Power along with our meter installation contractor (Allegiant Utility Services) has developed an efficient and economical deployment strategy to deploy meters in a quick and low-cost manner in 2019 and 2020.

What is being done with all of the old meters?

The old meters are being recycled by the meter installation contractor, Allegiant Utility Services.

Why does my new meter have a blue label?

Blue labels on the meter signify that it is metering a co-gen account. This could include solar, wind, or other renewable sources of energy.

Why does my new meter have a green label?

Green labels on the meter signify that the meter is built for a 320 amp load. The green colored label is to help distinguish the meter from the more common 200 amp meters which have a white label.

Can I opt out of receiving the new meters?

Two reasons opting out of the new meters doesn't make economic sense (for you, and the co-op):

1. The new meters provide numerous benefits, including:
 - Automated, accurate billing – We expect to read nearly all meters, which means fewer estimated reads and fewer periodic site visits to ensure accurate readings.
 - High bills – we can help analyze hourly and daily meter readings to help you better understand how to use electricity more efficiently. You can even view your electric usage online through Smart Hub.
 - Faster restoration – we will be able to pinpoint areas affected by outages so we can respond more quickly, and even automatically confirm when your power is restored.
 - Two-way communication – the meters send and receive information over power lines, so we can also use them for things like electric water heater load control to help reduce power costs. The information also allows members to view electricity use and billing information through Smart Hub.

Benefit: Members will be able to view their usage on an hourly basis by using SmartHub.



2. Fees. Due to costs associated with manual entry of data and service visits, fees will be applied to individuals to cover costs linked to any account or service where the above-mentioned benefits and cost-savings are refused.

LCP's board of directors has approved an opt-out policy that specifies technical requirements and associated meter reading fees. The policy allows members to opt out while ensuring the costs to do so are not incurred by other members. Members who choose to opt out must sign the opt out policy, which can be acquired by contacting the co-op. Once the signed opt-out form is returned, LCP will install a new meter, but the new meter will not contain a communication board, which means the meter won't have the ability to transmit information over the power grid.

What about electromagnetic fields (EMF)?

Electromagnetic fields are not new, nor are they an area of natural science that has gone without extensive study. EMFs naturally occur when voltage and current are present, are part of our normal surroundings, and observed in our everyday experience as magnetism, light, heat, and static-electricity. Aclara's TWACS Technology products function in relatively narrow bands of the total spectrum – low-frequency EMF at three to 3000 Hz.

The new meters use powerline communications technology that's used by over 350 electric utilities to serve more than 15 million metered services worldwide, and more than 11 million in the continental United States. TWACS utilizes existing power lines to transmit readings from meters to the utility substation and then back to the utility for processing.

The new meters do not operate using radio frequency, so there



are no wireless communications near homes, cabins, etc. The new meters will have similar functionalities as the meter you have now, except these new meters will provide even more benefits. The information the meters will give Lake Country Power is designed to benefit members.

- The new metering system will allow you to monitor your account, provides LCP the capabilities for pre-pay billing, read your meter from almost anywhere, and aid in outage restoration.

It's also worth noting that these meters will not interfere with medical equipment such as pace-makers. That's because the transmission power levels are too low to affect medical devices.

