

# It all adds up: Investing in a reliable electric system Just how much does it cost?

The electric co-op industry is capital intensive. We hope this quiz helps put into perspective some of the costs that go into your service. On the left you'll see a piece of equipment Lake Country Power uses in order to deliver electricity to your home. Please circle the answer you think accurately reflects the cost of the pictured equipment.



1.) How much does one 25 kva overhead transformer\* cost?

- a. \$75
- b. \$1,500
- c. \$180
- d. \$432

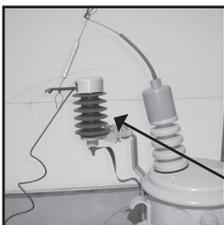
\*LCP has 27,788 overhead transformers on its system. It's a device that's used to raise or lower voltage along electric distribution lines to safely provide electric service to homes and businesses.



2. How much does one regulator\* cost?

- a. \$500
- b. \$2,200
- c. \$24,250
- d. \$12,000

\*LCP has 173 regulators on its system. Regulators maintain the proper voltage at your home so the lights don't dim and power quality isn't reduced if you live a long distance from the substation.



3) How much does a lightning arrester\* cost?

- a. \$78
- b. \$40
- c. \$58
- d. \$12

\* LCP has 34,574 lightning arresters on its system. Lightning arresters help protect consumer electric equipment against damage caused by lightning strikes.



4) How much does guy wire\* cost per foot?

- a. 59 cents per foot
- b. 10 cents per foot
- c. 95 cents per foot
- d. 70 cents per foot

\*A tensioned cable designed to add stability to utility poles. LCP has an average of 50 feet of guy wire per assembly, and the co-op has more than 5.1 million feet of guy wire on its system. This results in over \$3.57 million of guy wire.



5) How much does a Demand Response Unit\* (DRU) cost?

- a. \$173
- b. \$215
- c. \$97
- d. \$402

\* LCP began installing the new Aclara DRUs in 2020, which replaced all of the old load control receivers that have been used to control various EnergyWise® programs – dual fuel, off-peak storage space heating, cycled air conditioning, etc. LCP needed to do this exchange because the former technology was obsolete and will be formally retired by LCP's wholesale power supplier, Great River Energy, by year-end 2025.



6) How much does one OCR\* cost?

- a. \$210
- b. \$8,060
- c. \$1,100
- d. \$2,500

\*Oil-circuit recloser. LCP has 717 OCRs (215 oil OCRs and 502 electronic OCRs). A device that protects electric lines by momentarily interrupting service when a fault occurs, then restoring power automatically when the fault is cleared. This keeps outages from occurring when temporary problems happen, like branches touching a line.



**7) How much does one meter\* cost?**

- a. \$161
- b. \$60
- c. \$190
- d. \$25

\*LCP has 72,681 meters on its system. Meters measure and record the amount of electricity used by a consumer. LCP recently replaced all of the meters as part of an automated metering infrastructure (AMI) project. The new meters also record outages, blinks, usage history, power use trends and voltage fluctuations.



**8) What is the range in cost for a typical substation?**

- a. \$200,000
- b. \$3.2 million
- c. \$1.8 million
- d. \$580,000

\*LCP owns and operates 46 substations, to meet the needs of a safe and reliable electric system, LCP will invest over \$12 million in its current work plan through 2021 in the distribution system.



**9) How much do large bucket trucks cost?**

- a. \$350,000
- b. \$160,000
- c. \$100,000
- d. \$85,000

\*LCP has 65 line trucks, such as digger derricks and small and large bucket trucks, to maintain a reliable electric system.



**10) On average, how much do padmount transformers\* cost?**

- a. \$350
- b. \$850
- c. \$1,150
- d. \$3,000

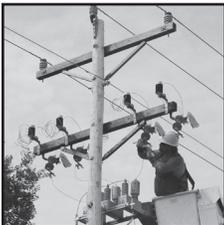
\*LCP has 13,240 padmount transformers on its system. Padmounts have the same function as overhead transformers, only this equipment is used with underground cable.



**11) How much does a standard pole\* typically cost?**

- a. \$400
- b. \$75
- c. \$563
- d. \$150

\*LCP has 135,288 poles on its system.



**12) How much does overhead wire\* cost per foot?**

- a. 90 cents per foot
- b. 58 cents per foot
- c. 7 cents per foot
- d. 44 cents per foot

\*LCP has 32,715,919 feet of primary overhead wire on its system.



**13) How much does underground cable\* cost per foot?**

- a. \$3.34 per foot
- b. \$.55 per foot
- c. \$1.10 per foot
- d. \$1.98 per foot

\*LCP has 11,490,474 feet of primary underground cable on its system. This price reflects a small single-phase line.

# About the Facilities Charge

Each month your bill reflects a facility charge for \$48.00 for all members. Perhaps you've wondered why there's a monthly fee for your electric service.

- The "fixed" or basic charge is a flat fee designed to recover a portion of the cost of delivering electricity to all members. The facilities charge reflects investments in poles, wires, transformers and other electrical equipment that's required to provide you with safe and reliable electric service.

- It also supports fleet, facility and customer service functions, such as line maintenance, right-of-way clearing and general administrative responsibilities and is similar to service or facility charges that other co-ops and utilities charge to help pay for equipment and services over time. Neighboring co-op facility charges in Minnesota range between \$24 and \$50 per month. Regardless of how often you flip on the light switch, the computer or TV, these costs are part of the bill you pay so that electricity is available to you when you turn on the lights, the TV or charge your cell phone.

- If you use only one kilowatt-hour of electricity and another member uses 100 kWh, Lake Country Power incurs the same cost to build the line, maintain the distribution system and deliver electricity to each member. This is why the monthly facilities charge is important to recover a portion of the cost of delivering electricity to all members and help maintain the financial health of the cooperative.

Answer Key: 1-B, 2-C, 3-C, 4-D, 5-B, 6-D, 7-A, 8-C, 9-A, 10-D, 11-C, 12-D, 13-A

