December 2005

Teleconnections

Published by:
Webster-Calhoun
Cooperative Telephone Association

1106 Beek Street, PO Box 475, Gowrie, Iowa 50543 ★ Phone: 515-352-3151 ★ www.wccta.com ★ www.wccta.net

Why Fiber Optic Technology?

As "Fiber to the Home" construction progresses in the Somers, Knierim, Moorland, Pilot Mound and Boxholm areas, there are many questions: "What is fiber optics?" "Do I need that? I don't have a computer."

Based on industry activity, it is evident that fiber optics have become the industry standard for global transmission of telecommunication information. The choice is not whether to convert to optical fiber, but rather *when* to convert to optical fiber. According to General Manager, Daryl Carlson, "A migration to FTTP (fiber to the premise) architecture is a very integral part of WCCTA's future, enhancing the broadband capabilities of WCCTA's network to ensure member's current and future service needs."

Fiber optic cables have been used throughout the WCCTA network for many years. The next step is to take the cable directly to the home. Fiber optics will allow homes to receive regular telephone service, High Speed DSL, and several streams of Digital TV as well as additional bandwidth for unseen future applications. Studies have also shown that future costs to maintain fiber networks and equipment is less than the Cooperative's current copper network.

The capabilities of fiber optics far exceed those of copper and will offer different opportunities for different people. This is an investment in the future that we feel will bring value to our member customers and our communities.

Feel free to contact the Webster-Calhoun Cooperative Telephone Association office with any additional questions or concerns you may have regarding our "Fiber to the Home" project.

Happy Holidays from the Employees and Directors at Webster-Calhoun Cooperative Telephone Association

Please Note: The office will be closed on December 23rd, 26th and January 2nd.

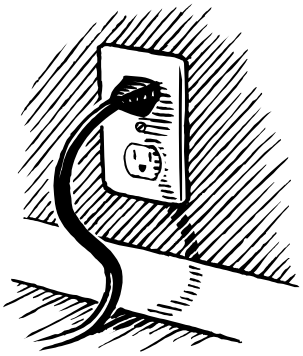
Making A List And Checking It Twice

Are you getting everything done on your "To Do" list this month? Mark off "paying the phone bill" for good and sign up for **Direct Payment!** WCCTA will take care of that chore for you and save you valuable time and money!

Using on-line bill payment? *On-line bill payment through a financial institution has become popular lately but make sure to allow two weeks for your payment to get to WCCTA!!*

The Power of Fiber Optics

There is a minimal cost to the owner/member when installing the new fiber optic equipment. This is the cost of electricity to run the equipment that will be installed on the side of your home referred to as the Optic Network Terminal (ONT). (An ONT is the Network Interface Device for fiber optics.) This power is used to recharge the backup batteries/power supply unit that the Cooperative will install inside your home near the ONT as well as to power the ONT unit itself. The batteries should give you additional hours of talk time when the power goes out. WCCTA technicians have the capability through this new system to check when your batteries are going bad and will replace these batteries at no cost to you, the customer. The anticipated life of these batteries is anywhere from three to five years before replacement is needed.



Many customers may already have the ONT units added to the side of your home. Optical cards will need to be installed inside the ONT units and the power supply installed in your home before making the change to the fiber network. This process may take several months; however, please be aware that a WCCTA representative will contact you for access to your home. Your support and cooperation is appreciated as we make strides toward our investment in the future.

Technology Terms to Know…

Fiber Optic Cable – A technology that uses glass (or plastic) threads (fibers) to transmit data. A fiber optic cable consists of a bundle of glass threads, each of which is capable of transmitting messages modulated onto light waves. Fiber optic cable has several advantages over traditional metal (copper) communication lines: 1) Fiber optic cables have a much greater bandwidth than metal cables. This means that they can carry more data. 2) Fiber optic cables are less susceptible than metal cables to interference. 3) Fiber optic cables are much thinner and lighter than metal wires. 4) Data can be transmitted digitally (the natural form for computer data) rather than analogically.

Bandwidth -- A range within a band of frequencies or wavelengths. Also refers to the amount of data that can be transmitted in a fixed amount of time. For digital devices, the bandwidth is usually expressed in bits per second (bps) or bytes per second. For analog devices, the bandwidth is expressed in cycles per second, or Hertz (Hz).

How is your name listed in the Central Iowa Area Telephone Directory?

Please contact the WCCTA office at 352-3151 by the end of the year to make any listing changes.