



# United Electric Cooperative's Fiber Initiative

## *Improving the Rural Way of Life*

### What is United Electric's Fiber Initiative?

United Electric is seeking a grant / loan combination through the American Recovery and Reinvestment Act (ARRA) that would lead to the construction of approximately 1,500 miles of fiber lines, connecting homes and businesses in our area to a next generation fiber infrastructure.

This fiber optic network is capable of providing broadband internet connections at up to 100 Megabytes (current DSL offerings are normally 3 to 5 Megabytes), high definition television/video services, IP telephone services, and smart grid technologies allowing United Electric to improve the efficiency and reliability of our electric system.

On top of the nearly unlimited capacity this fiber network can provide, the system will provide open access to service providers. Open access means you will have the ability to select from an array of services and multiple providers, leading to more choice and lower cost.

### What will the system cover?

The business case for this fiber system has it's own challenges. United Electric Cooperative has the lowest density in the state at 2.4 members per mile, meaning we serve fewer members per mile than any other system. The 1,500 miles of fiber that would be constructed in this project would cover roughly 40% of our system and just over 50% of our membership. This system would also allow us to connect a significant number of businesses and community anchor institutions in our area.

To compete for federal dollars, this plan allows United Electric to meet the minimum criteria of the ARRA funding guidelines.

With a 70% grant / 30% loan, this initiative is United Electric's best, and perhaps only, opportunity to provide next generation fiber to rural Northwest Missouri.

### What is fiber to the home?

Fiber to the home means using a high capacity fiber connection to replace the lower capacity phone lines and coaxial cables used today. Many of the services we use now, such as television, phone, and data services are becoming IP (internet) based. The higher bandwidth provided by fiber allows more robust delivery and new options for these services.

### What are the benefits of a fiber optic network?

Capacity, choice, and speed are some of the obvious benefits fiber provides. What may not be as obvious is the potential that comes about when technology opens the door to opportunity. While Rural America has often struggled to gain access to the highest level of education, health care, retail, and other services, the ability to connect people and ideas at the speed of light changes everything.

**Economic Development:** High speed connectivity enhances the potential for current businesses, while providing the infrastructure to attract entrepreneurs, knowledge workers, and technology-based companies that would have not otherwise considered Northwest Missouri.

**Education:** All levels of the education continuum including primary, secondary, post-secondary, home-schooling, and continuing education programs stand to gain incredible opportunities in rural areas. The ability to provide remote class instruction, shared course offerings, and the ability for teachers and administrators to network with peers present just a few of the examples high speed connectivity offers.

**Health Care:** Telemedicine and Telehealth allow rural providers to offer a whole new range of health services. From access to specialists, retrieval of health records, improved emergency response, reducing transportation costs, to new alternatives for home health and e-visits, connecting health professionals to their patients in real time has the potential to revolutionize health care in rural America.

There are numerous other benefits of a fiber infrastructure in the areas of agriculture, public safety, government administration, real-estate and land values, and the overall quality of life in our region. It is safe to say the availability of a fiber optic network would touch some, if not many aspects of our life.

### What services will be offered through the network?

Services offered over the network will include triple-play bundle options from multiple Internet, video and voice providers as well as home security, video surveillance, distance learning, tele-medicine, and other future end-user applications. Residential service levels will start at \$29.99 for internet service and approximately \$120 for triple-play video, voice, and data packages, while commercial rates will start at \$69.99.