

Q 08 Executive Summary:

Sioux Valley Rural Television, Inc. dba. Sioux Valley Wireless is applying for funding through the Broadband Initiatives Program to expand WiMAX wireless broadband service in four rural South Dakota and Minnesota communities.

The following executive summary and this application provide for the following:

- Cost-effective, broadband wireless communications (WiMAX service) for domestic, commercial and public service entities to under-served, rural areas in South Dakota and Minnesota
- Infrastructure cost estimated at \$960,234 with 50% grant applied for in the amount of \$480,117
- Project not feasible without federal grant funding
- Project will serve the following rural and under-served communities (and surrounding eight-mile radius) with a combined total of 9,537 households—
[REDACTED]
- Project will stimulate growth and economic development by extending Internet service to a possible 862 businesses and 81 critical community facilities
- Subscriber penetration for the proposed four communities estimated at 1,720 households within five year period
- Project has potential to interface WiMAX technology with electric utility “smart grid” applications
- Anticipated subscriber rate would create internal and external job opportunities
- Applicant owns and operates the licensed spectrum within each community and all proposed projects are “shovel ready”
- Applicant has 20 years experience in wireless industry and 12 years experience in the Internet industry
- Financing for 50% of project is secured from Sioux Valley Energy (the parent company)
- Applicant will comply with all non-discrimination and interconnection requirements

Sioux Valley Rural Television, Inc, dba: Sioux Valley Wireless is requesting stimulus funds to construct four WiMAX systems in rural areas throughout southeastern South Dakota and southwestern Minnesota. This build-out would not be feasible without federal grant funding. WiMAX is an established international standard for wireless telecommunications that operates on licensed frequencies of radio spectrum to deliver high-bandwidth data services. WiMAX, which stands for Worldwide Interoperability for Microwave Access, is governed by the WiMAX Forum, formed in June 2001 to promote

conformance and interoperability of the IEEE 802.16 standard. The Forum describes WiMAX as "a standards-based technology enabling the delivery of last mile wireless broadband access as an alternative to cable and DSL." In addition, WiMAX technology allows interoperability of devices that will encourage broad based delivery of broadband technology to underserved areas.

The total project cost would be \$960,234 with Sioux Valley Wireless requesting a 50% grant equaling \$480,117. Sioux Valley Wireless has chosen the communities (and surrounding eight-mile radius) of: [REDACTED]

[REDACTED] The proposed project area is considered very rural with 781.5 square miles of rural coverage and only 22.5 square miles of urban coverage. Collectively, in the approximate 800 square-mile radius of the combined communities, there is a population of just over 20,000 inhabitants residing in 9,537 households. There are approximately 862 businesses and 81 critical community facilities, organizations and safety entities within the proposed communities. Sioux Valley Wireless is anticipating a subscriber penetration of 1,720 households within five years. This anticipated subscriber rate would create several internal and external job opportunities. Internally, the proposed WiMAX build-out would require additional labor commitments for customer service, technical assistance, information technology and marketing to handle the increased subscriber count. Sioux Valley Wireless anticipates the need to hire or retain 3 to 4 FTE's as a direct result of the Sioux Valley Wireless deployment of WiMAX in the proposed service area. Externally, we also anticipate that mobile WiMAX services will create new job opportunities within the identified communities and beyond. Examples include: distributors of WiMAX services and contract installers as well as jobs in equipment manufacturing, procurement and installation.

High-speed broadband coverage is a necessary and essential service to rural areas which are trying to stimulate growth and economic development. Mobile WiMAX technology, which would be deployed in the aforementioned areas, is considered cutting-edge and next generation technology. The primary licensed frequency band that WiMAX operates within (2.5-2.7GHZ) has massive spectrum availability and capacity. WiMAX technology is based on the IEEE 802.16 standard. The service which Sioux Valley Wireless is proposing to deploy in the four communities and surrounding areas will provide residential users combined speeds of 2.5 MB and business users combined speeds of 3 MB. WiMAX technology has the potential to draw new businesses and revitalize these areas by providing mobile, broadband wireless technology that will work in any area of the country. We anticipate the ability to obtain roaming agreements with other WiMAX carriers to allow this to happen.

In addition to residential and business uses, WiMAX can serve as a vital two-way communications link for public safety entities, such as law enforcement, fire and emergency medical services. Sioux Valley Wireless is ready to work in tandem with these critical community facilities, organizations and public safety entities to improve the lives of individuals throughout the proposed WiMAX service area. Furthermore, Sioux Valley Wireless is also committed to working closely with [REDACTED] tribal leaders [REDACTED]. We are exploring rate incentives to critical community facilities, organizations and public safety entities.

We are pursuing a potential opportunity to interface WiMAX technology with “smart grid” applications. The parent company of Sioux Valley Wireless, Sioux Valley Energy, has recently submitted a federal grant requesting funds to assist with the installation of Advanced Metering Infrastructure or AMI which is a smart grid technology. The parent company is working with the National Rural Telecommunications Cooperative (NRTC) on a pilot project to test a select number of meters which utilize WiMAX technology. If proven successful, Sioux Valley Wireless would work with municipal utility systems and other area entities to implement smart grid communications through these WiMAX Internet capabilities.

Sioux Valley Wireless has 20 years experience in the wireless industry including 12 years in the Internet area. It has recently constructed two WiMAX systems, with a third under construction at this time. Sioux Valley Wireless is capable and ready to build additional WiMAX services quickly and efficiently and is in a good position to do so because of past experience. We can duplicate installation and understand the intricacies of both the hardware and software needed to implement a WiMAX system. Because Sioux Valley Wireless owns and operates the licensed spectrum within the proposed WiMAX service area, it can start the project immediately and each site is “shovel ready”. Financing has been secured from Sioux Valley Energy (the Sioux Valley Wireless parent company) to finance 50% of the project costs. The proposed four-community WiMAX build-out can substantially be completed within two years.

Sioux Valley Wireless shares employees with its parent company. The parent company, Sioux Valley Energy, is a Rural Utilities Service Title One borrower and is bound by federal law to comply with non-discrimination standards. All Sioux Valley Wireless employees follow those standards and are provided necessary and routine training on non-discrimination procedures. Additionally, Sioux Valley Wireless accepts the following FCC policy (FCC 05-151): (1) consumers are entitled to access the lawful Internet content of their choice; (2) consumers are entitled to run applications and services of their choice, subject to the needs of law enforcement; (3) consumers are entitled to connect their choice of legal devices that do not harm the network; and (4)

consumers are entitled to competition among network providers, application and service providers, and content providers.

At this time, Sioux Valley Wireless does not have any active interconnection agreements. However, it is fully capable of interconnecting on demand and is willing to work with interested parties to fulfill that requirement. Applicant will comply with all non-discrimination and interconnection requirements.

In summary, Sioux Valley Wireless is well-prepared and has the knowledge and expertise to quickly provide wireless broadband services to the underserved rural communities of [REDACTED]