

Broadband USA Applications Database

Applicant Name: Illinois Rural Electric Cooperative

Project Title: West Central Illinois Broadband

Project Type: Last Mile Non-Remote

Executive Summary

Opportunity Illinois Rural Electric Cooperative seeks state and federal assistance to provide low-cost (\$32.50/month for 768 kbps service), broadband Internet to six, underserved Illinois counties. Less than 32% of consumers in those counties have broadband Internet service. To take advantage of this opportunity, the cooperative would, with state and federal assistance, build out its wireless network to be able to provide service to all of the proposed area, and it would increase its bandwidth to be able to provide 768 kbps entry level service. It would immediately increase bandwidth to 768 for 2,100 consumers, would create four additional full-time positions, and it could immediately begin building infrastructure to add additional consumers. This increase in capacity would enable the cooperative to work with 12 community organizations, principally schools, to develop computer centers – 12 are proposed in this Round, like numbers are anticipated for Rounds Two and Three. The cooperative's wireless service is currently provided by 55 broadcast units on 48 structures. This application seeks to add 34 broadcast units on an additional 31 structures. Additional broadcast units could provide additional bandwidth as needed. Proposed Funded Service Area The proposed service area consists of Pike, Cass, Scott, Morgan, Greene and Calhoun Counties in Illinois. No community in the area has a population of 20,000 or more. The largest community is Jacksonville, Illinois. Others include Winchester, Pittsfield, Beardstown, Virginia, Carrollton, and Hardin. For the most part, it is prairie, and wireless technology is particularly well suited. The population in the counties declined 26.5% from 1900 to 2000, and recent data show a decline from 2000. We believe that if we don't provide broadband Internet, no other firm will for most of the area. It is much like our provision of electricity in the 1930s when no one else would provide electricity to the rural community. Without access to broadband Internet services for employment and educational activities, we believe it is possible that the population could continue to decline, making basic costs for schools, roads, public safety and basic services unsustainable for the remaining population. The median household income in the six counties, at \$34,333, is less than 70% of the national average. ACT scores at 16 of the area's 19 public high schools are lower than the state average. More than a third of those schools' student populations exceed the average percentage of low income students in school populations in the state. (Income data are from Census Bureau for 2000, the most recent available.) Passed Consumers We estimate that of the area's 36,287 (2000 Census, the most recent data available.) households and 2,000 businesses, 33% would continue not to have broadband Internet five years from the beginning of the project. Community Institutions In an accompanying Round One BTOP application, we propose development of 13 community computer centers, principally at schools. If our Round One proposals are funded, we anticipate similar applications for computer centers in Rounds Two and Three. That development depends on the success of this infrastructure application.

Proposed Services We propose a basic service of 768 kbps and service at 1.5 mbps and at 2 mbps. We forecast 7,400 users at the end of five years, but we acknowledge that demand for Internet service has at times exceeded earlier estimates.

Non-discrimination and Interconnection We currently have a fair access policy on our web site which shows our commitment to providing service for any lawful Internet activity. We would allow any other provider use our network providing only that it is technically feasible and that such other provider agree to pay its share of costs.

Type of Broadband System Through a last mile infrastructure project, we propose to build out the existing fixed wireless network which consists of a multi-tiered infrastructure made up of core Internet routers, wireless backbone radios, and point-to-multipoint mesh radios. The system consists of Sky Pilot proprietary radio technology and firmware solutions utilizing both licensed and unlicensed radio spectrum devices. Cisco products are used to provide core routing and switching.

Qualifications of Applicant Illinois Rural Electric Cooperative has \$65-million in assets and its principal activity is operating an electric distribution system. It provides electricity in all or large parts of the six counties in this proposed service area, and in small parts of four additional counties. It is a borrower from the Department of Agriculture's Rural Development Utilities Program, and it has existing credit facilities available from CoBank and from National Rural Utilities Cooperative Finance Corporation. Since, in most of its territory, consumers had no access to Internet service, it currently provides Internet service to 2,700 consumers, the largest portion of whom are wireless consumers, most of them served at 512 kbps. The cooperative, itself, has in place Internet service, installation, billing, sales, engineering and administrative functions supporting its Internet service. It has, as well, established relationships with firms which connect its system to the Internet, construction firms, and Internet network monitoring/maintenance consultants. It regularly secures the needed permits and constructs new facilities. The cooperative is ready to significantly expand its infrastructure and bring broadband service to consumers immediately upon receipt of state and federal assistance, and it has the financial strength to underwrite initial losses and to ensure continuing operations.

Overall Cost The total budgeted cost is \$5,768,000, of which it is proposed that the cooperative bear \$3,345,440, the State of Illinois \$576,800 and the federal government \$1,845,760.

Overall Subscribers The following figures are the number of broadband subscribers at the end of the five-year forecasted period: 2010 – (3571); 2011 – (4651); 2012 – (5731); 2013 – (6631); 2014 – (7411).

Jobs The cooperative would add four full-time positions in connection with the proposed infrastructure/bandwidth expansion. One position would be added with the proposed BTOP computer center project. We have not attempted to forecast the number of jobs created as a result of consumers having broadband Internet access throughout the six county area.