

Broadband USA Applications Database

Applicant Name: Central Wisconsin Communications LLC dba Solarus

Project Title: Central Wisconsin Communities (CWC) Connect With Us

Project Type: Middle Mile

Executive Summary

True to the spirit of the American Recovery and Reinvestment Act (ARRA), Solarus seeks funding for a shovel-ready middle mile fiber project that will connect both unserved and underserved communities as well as medical, technology, educational, and public safety centers in Central Wisconsin. Solarus is a 114-year-old company employing 150 people in Central Wisconsin, and our Central Wisconsin Communities (CWC) Connect With Us project has the support of 19 local community groups. Additionally, Solarus is working with at least three collaborators who either have or are seeking funding from other sources. Construction of the all-important middle mile – consisting of three 10 gigabit Ethernet rings – will be the starting point for a cutting-edge, end-to-end network that Solarus and others will seek assistance to build in future BTOP funding rounds. As many in the industry have noted, bringing broadband to rural areas is slowed not so much by a lack of last mile providers as it is by a lack of high-speed, reasonably priced middle mile facilities. The American Cable Association, for instance, said in July 2009 comments to the Federal Communications Commission (FCC), “While some areas may have ‘middle mile’ infrastructure, the price to connect and access the ‘middle mile’ facilities can be an obstacle to offering an affordable high-speed broadband product.” Similarly, Allied Fiber told the FCC, “The national broadband plan must address the need for affordable middle mile facilities of sufficient, scalable bandwidth to accommodate next generation last mile networks. . . . [E]specially in rural areas.” It is this problem of middle mile infrastructure that Solarus seeks to remedy for the communities of Central Wisconsin. a. The project is exactly the type we believe is envisioned under BTOP, for it will facilitate broadband Internet access in rural Wisconsin communities that currently either lack broadband access entirely or have only limited, slow access. There is data for one of these communities showing that residents who currently leave the area to seek employment elsewhere would remain if the broadband infrastructure were robust, contributing to the area’s overall economic development. The project also fulfills BTOP’s purposes by linking regional medical facilities, connecting regional technology colleges to the University of Wisconsin, enabling school districts in the area to avail themselves of distance learning and other resources, and providing connectivity for Smartgrid implementation in central Wisconsin. b. CWC Connect With Us will connect the central Wisconsin communities of Wausau, Marshfield, Steven Point, Wisconsin Rapids, Township of Plover, and Adams Friendship. (N.B. While Wisconsin Rapids is not lacking in broadband access, it is included so that the other communities can link to it.) In addition to these six communities, the project will offer broadband connectivity to 66 additional, smaller towns, communities, and villages. Through subsequent projects and funding rounds, Solarus would use a combination of fiber to the premise and wireless EVDO and LTE technologies to bring high speed Internet access to the central Wisconsin counties of Wood, Portage, Adams, Juneau,

Waushara, Green Lake, Marquette and Marathon. c. The project passes 30,952 households and 7,851 businesses in the region. d. CWC Connect With Us will pass at least 70 anchor institutions and public safety entities in the six largest communities. It will also pass public safety entities in the additional 66 small communities, towns and villages in the region. In addition to passing these institutions and entities, CWC Connect With Us has broad support from medical facilities, educational institutions, libraries, community organizations and chambers of commerce throughout the region, 19 of which have written letters that are attached. e. The services that this middle mile backbone project will provide include the following: · Enabling robust, affordable Internet access to residents, businesses, community organizations and medical, educational and public safety entities in rural areas where Internet access is spotty or non-existent · Connecting campuses of a regional technical college · Providing high-speed data networks to hospitals and their rural locations · Connecting five county seats · Enabling five counties to collaborate on emergency services · Extending a statewide network for distance learning and Internet access to schools and libraries · Extending grants awarded to a community organization to ensure digital literacy and access to all people, especially those with low income, and to develop their workforce through job training · Providing connectivity for Smartgrid implementation in Central Wisconsin f. Solarus is committed to adhering to the principles of the FCC's Internet Policy Statement. We will not favor any lawful Internet application or content over another, and our middle mile service will act strictly as a transport medium for last mile providers, providing the connection to the public Internet backbone. Solarus intends to negotiate in good faith with all interested parties. Our infrastructure and business plans are structured to serve more than one last mile provider. g. This shovel ready project provides redundant fiber rings with 10 Gigabit Ethernet packet-based transport technology. The network will be capable of aggregation and transport of different traffic types that are critical for a smooth migration to next generation services. The network will allow us to offer carrier class Ethernet transport with the necessary flexibility for multi-service handoff, interworking, and gateway functionality. The network will support topologies such as point-to-point, star, linear, tree, ring/dual ring, and hybrid. The network will also carry voice, data, and video traffic with quality of service. h. Solarus, a 114-year old company with 150 employees, is one of the largest Internet service providers in Wisconsin. Solarus has been providing Internet access since 1995, broadband access since 1999, and fixed wireless broadband since 2004 in addition to digital telephone and digital cable service. Solarus's tenured executive team and staff comprise a highly skilled group of professionals. We are an approved provider for Wisconsin's statewide network, BadgerNet, which serves all 72 counties by providing wide area network, Internet transport and video applications to state government and educational entities. Additionally, 19 community organizations have submitted letters in support of the CWC Connect With Us middle mile project. i. The overall cost of the broadband system is \$13,204,188. j. The overall expected subscriber projections for the project are as follows: 30,952 households passed; 7,851 businesses passed; 314 anchor and public safety organizations passed. k. The CWC Connect With Us project will help to maintain Solarus's workforce of 150 and potentially grow it. It also will provide jobs for the construction of the project. We currently are working with community workforce development staff to get more specific figures. The number of jobs that could be generated in central Wisconsin communities is difficult to estimate precisely, but there is no question that employment will grow. In Marshfield, for example, a telecommunications study found that potential employees – including college students – now leave the area because of the lack of a broadband infrastructure. Other rural

communities have told Solarus they are in the same situation and are losing jobs and employees to more urban areas. Several of these towns would like to commission their own telecom study and would do so but for the cost. In addition to retaining potential employees in the region, the project has the potential to attract new residents and businesses once a robust infrastructure is in place. Furthermore, the Marshfield telecom assessment found that because the area does not have broadband access, the Marshfield Clinic and St. Joseph Hospital find it difficult to recruit doctors, medical transcriptionists and other professions who live outside city limits. Finally, CWC Connect With Us also meets the test of providing access to “job-creating facilities located within a state-designated economic zone,” as Adams County was recently awarded designation as a Wisconsin Development Zone.