



Axiom Technologies
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January 28, 2010

ConnectME Authority
Phillip Lindley, Executive Director
138 Statehouse Station
Augusta, ME 04333

Re: Round Four – Town of Penobscot Broadband Project

Funding requested: \$74,374.30

Dear Members of the Connect Maine Authority,

Axiom Technologies, in collaboration with the Town of Penobscot, submits this Pre-application letter for Round Four ConnectME funding. A letter of support from the Town of Penobscot is attached.

Penobscot has 723 homes, based on the 2009 State Planning Office Projections. Axiom has contacted Time Warner Cable, Fairpoint Communications and Premium Choice Broadband and based on ongoing discussions will determine the unserved homes in this 24.8 square mile area.

Axiom has a Reseller's Agreement with Fairpoint Communications and is committed to deploying DSL where possible and only deploying wireless in the unserved areas.

Axiom has had discussions with Tom Federle, attorney for Time Warner Cable regarding overlap of service. An Overlap Avoidance Agreement will be signed by Axiom for Time Warner Cable if it is determined that there is cable Internet availability in some areas of Penobscot. Time Warner Cable understands that wireless service knows no boundaries and that there will be crossover of Axiom's wireless network over Time Warner's existing coverage. However, per the Overlap Avoidance Agreement, Axiom will not deploy wireless service if the subscriber can access Time Warner's cable Internet service.

Premium Choice Broadband has some wireless coverage in the Penobscot area and they have provided Axiom with maps depicting their coverage.

At a meeting represented by several towns in the Penobscot Region, including Penobscot, on January 14, 2010, town officials and the public confirmed that Penobscot has no broadband availability in several areas and requested Axiom to apply to the ConnectME Authority for funding. Lack of broadband in Penobscot, Maine was confirmed via the ConnectME Broadband Availability mapping. These reports demonstrate the essential need for broadband capability in unserved areas of Penobscot, Maine.

Axiom Technologies is a telecommunications company located in Machias, Maine that provides broadband, Internet access options and technical computer and networking services to businesses and residential subscribers. We have been working diligently for the past five years in bringing high-speed, wireless broadband service to Washington County and beyond. Expanding our existing network to include Penobscot is technically viable and achievable within a relatively short time frame. A tower will be constructed (site to be determined) and an estimated four smaller, “mini-PoPs”, will be installed throughout the region to expand coverage in order to reach a 90% goal to the unserved areas. The Town of Penobscot will provide the land, if site is viable, to construct the tower as part of the grant match.

Service is provided to the customer’s premises (either business or residential) via wireless technology. The systems utilized are fixed point to multipoint radio networks whereby multiple subscriber radios at the customer’s premises connect to master transmitter sites on towers, hilltops and buildings that possess geographical advantages including height and clear sight lines. In this manner, site selection for these “Access Points” is similar in process to that of a cellular phone carrier; however, our cost to deploy transmitters is much lower, allowing more transmitters to be installed within a geographical area, thereby improving coverage and accessibility.

Axiom utilizes several different radio frequencies, 900 MHz, 2.4 GHz and 5.8 GHz which have proven very effective in high-speed broadband deployment. We have added 3.6 GHz radio gear to transmitter sites which enables the availability of a 10Mbit symmetrical product that is cost effective. Axiom has obtained the necessary FCC licensing to field and operate radio electronics in the 3.65 GHz band. The technologies utilized are capable of over-the-air data transmission rates up to 100mbit. Axiom’s subscriber plans set customer bandwidth at between 1 and 10mbit downstream and 500k – 1.5mbit upstream for residential service. Up to 10mbit symmetrical service is available for businesses requiring increased upstream bandwidth for server hosting or similar applications. In addition to the advanced radio systems, Axiom will also be installing augmented power systems for protection against AC grid outages; the primary cause for service interruption in the Downeast region. These power systems utilize deep battery arrays and, where terrain permits, power generation via hybrid solar and wind generators.

Axiom has a proven technical last mile solution for pushing broadband into rural communities that have been historically blocked from service due to technological, geographical and financial hurdles. Five years of deployment and operation of our

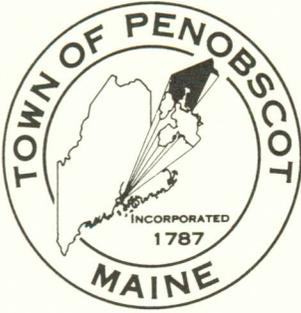
technology has demonstrated its viability as a cost effective, adaptable and reliable solution for rural Maine.

Axiom Technologies, in collaboration with the Town of Penobscot, is committed to extending this proven technology into unserved areas and is seeking \$74,374.30 in ConnectME grant funding.

Sincerely,

Susan M. Corbett, CEO

Nelson Geel, CTO



Town of Penobscot

TOWN OFFICE
P.O. Box 4
PENOBSCOT, MAINE 04476

January 19, 2010

Mr. Phillip Lindley
Executive Director
Connect ME Authority
138 State House Station
Augusta, Maine 04333

Mr. Lindley:

As both an un-served and under-served area of rural Maine, the Town of Penobscot lacks adequate broadband services. This letter serves as a preliminary application for resources available under the current round of Connect ME Authority Grant Funds—funding designed to provide broadband to areas of rural Maine such as Penobscot.

High speed internet service is no longer a luxury—it has fast become a necessity of business, education, government, and living day-to-day.

Businesses today, seeking a market for their services or products, need to have a web site as an integral part of their image. Today's internet is the "Yellow Pages" of yesterday. People do business, whether it is choosing a Bed & Breakfast, booking a tourist activity or buying art work, because of an image advertised through the internet on a web site...and Web site management is not possible without broadband availability. People in rural areas working out of their homes, need the availability of this broadband service. Today broadband is not an option, it is a need.

Unavailability of broadband impedes education. Children who have high speed service at school come home to do homework and research on dial-up. In rural areas, the internet has stepped in to provide a source of information previously unavailable to students. The lack of large research libraries has been largely eliminated by sources available over the web...if the students have acceptable access to it.

The State of Maine is requiring more and more use of the internet by towns and municipalities. Motor Vehicle Reporting, Central Voter Reporting, and the Inland Fisheries & Wildlife MOSES program are just a few examples. Towns need web sites just as businesses do, and it is impossible to maintain one without broadband access.

Adults, too, need the research ability of the web. No other example strikes so close to home in these days of unemployment as access to the employment sites and job searches. The instant sending of resumes when applying for a job to support a family should NOT be considered a luxury!

The Town of Penobscot looks forward not only to working with Connect ME and Axoim Technologies, but also to the results of such an endeavor.

Sincerely,

Penobscot Selectmen:
Stanley Shorey
Paul Bowen
Harold Hatch

Stanley C Shorey
Paul J Bowen
Harold A Hatch