



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 Lamoine Broadband Project

Funding requested: \$94,958.43

Dear Members of the Connect Maine Authority,

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

Lamoine has 803 homes, based on the 2009 State Planning Office Projections. Axiom has contacted Time Warner Cable and Fairpoint Communications and based on ongoing discussions will determine the unserved homes in this 34.4 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 Lamoine. 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.

In phone conversations with Lamoine Selectmen, town officials confirmed that Lamoine has no broadband availability in several areas and requested Axiom to apply to the ConnectME Authority for funding. Lack of broadband in Lamoine, Maine was

confirmed via the ConnectME Broadband Availability mapping. These reports demonstrate the essential need for broadband capability in unserved areas of Lamoine, 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 Lamoine 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 Lamoine 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 Lamoine, is committed to extending this proven technology into unserved areas and is seeking \$94,958.43 in ConnectME grant funding.

Sincerely,

Susan M. Corbett, CEO

Nelson Geel, CTO

Town of Lamoine, Maine
606 Douglas Hwy.
Lamoine, ME 04605
207-667-2242
e-mail town@lamoine-me.gov,
website www.lamoine-me.gov



January 22, 2010

Ms. Susan Corbett
Axiom Technologies
4 Main St.
Machias, ME 04654

Dear Ms. Corbett,

Thank-you for taking the time to speak with me this morning about your company and the possibilities of expanding broadband coverage to unserved areas of our community.

The Town of Lamoine is greatly interested in pursuing further discussion of opportunities to make broadband available to homes where the service is not currently available. Nearly every day we are approached at the town office by people asking for service. The Board of Selectmen has made business development a top priority, and expanding broadband service so that it is available to all in town is a key to that. Just last night the Board met with residents of a subdivision road who told them that had they known ahead of time they would not be able to get high speed internet service, they would not have built or moved there.

We understand that your company may be pursuing a ConnectME grant, and would like at some point to meet with you to discuss the possibilities and responsibilities for that.

Sincerely,

Stu Marckoon, Adm. Asst. to the Selectmen

SM/me
Cc: Selectmen, File