



Axiom Technologies  
3 Water St.  
Machias, ME 04654  
(207) 255-0679  
www.axiom-tech.net

---

January 19, 2010

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

Re: Round Three - Amendment to the Town of Eastbrook Grant  
Change of Scope – Replace grant with Town of Gouldsboro

Funding requested: \$128,688.18

Dear Members of the Connect Maine Authority,

Axiom Technologies, in collaboration with the Town of Gouldsboro, submits this Amendment to the Town of Eastbrook Grant from Round Three ConnectME funding.

As we discussed at the 12/19/09 ConnectME Authority Meeting, Axiom withdrew the Town of Eastbrook grant because another Internet Service Provider was investing private funds and deploying broadband in Eastbrook. Based on the Authority's recommendation, we are submitting an amendment requesting that the Round Three funding be applied to the Town of Gouldsboro.

Gouldsboro and its villages, Prospect Harbor, Corea, West Gouldsboro, South Gouldsboro and Ashville have 1329 homes, based on the 2009 State Planning Office Projections. Time Warner Cable and Fairpoint Communications have some service in this 50.4 square mile area; and Time Warner Cable and Fairpoint have an estimated 40% coverage of cable and DSL Internet coverage (percentage based on BTOP Public Notices). Axiom Technologies and the Town of Gouldsboro have a goal of deploying wireless high-speed broadband availability to 90% of the unserved households.

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 (see attachment) will be

signed by Axiom for Time Warner Cable, if awarded this grant amendment by the ConnectME Authority. Time Warner Cable has also provided a street level map (see attachment) of their cable service in Gouldsboro and understands that wireless service knows no boundaries and that there will 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.

At a Gouldsboro Selectmen's meeting on January 7, 2010, town officials and the public confirmed that Gouldsboro has no broadband availability in several areas and requested Axiom to apply to the ConnectME Authority for funding. Lack of broadband in Gouldsboro, Maine was confirmed via the ConnectME Broadband Availability mapping. These reports demonstrate the essential need for broadband capability in the unserved Town of Gouldsboro, 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 Gouldsboro is technically viable and achievable within a relatively short time frame. A tower will be constructed (site to be determined) to serve the majority of the town and at least four smaller, "mini-PoPs" installed throughout the region to expand coverage in order to reach the 90% goal. The Town of Gouldsboro 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 3.65Ghz 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 Gouldsboro, is committed to extending this proven technology into this unserved area and is seeking \$128,688.18 in ConnectME grant funding.

Sincerely,

Susan M. Corbett, CEO

Nelson Geel, CTO