
PowerConnect™ Community Broadband Network Deployment And Delivery of Related Communication Services

for

ABC County, KY

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2 Introduction

Communities throughout America have been left behind by their incumbent telecommunication providers, requiring them to find other solutions for meeting the Internet access needs of their local government, residents and businesses.

Access to high-speed, broadband Internet service is becoming increasingly necessary to participate in modern life. The Internet is a gateway to information that educates the public, enables participation in the government, and enhances economic prosperity. Analysts predict that in the not-too-distant future, all media - television, radio, telephone, movies, video games, web content - will be delivered via the Internet.

Enter the Community Broadband Network. These networks use unoccupied space on the public airwaves to provide dependable high-speed Internet connections, digital phone and even video services to homes and businesses all across America without the high cost and hassle of traditional phone and cable infrastructure.

To address this opportunity, PowerNet Global Communications has assembled the expertise and resources to deploy Community Broadband Networks and deliver turnkey communication services that, in partnership with local Affiliates, meet the broadband needs of consumers, businesses, and government.

PowerNet Global is the first company to put the pieces together to deliver Community Broadband services in an end-to-end solution that we call *PowerConnect™ Community Broadband*. This solution includes:

- **PowerConnect™ Community Broadband Network** - Complete Community Broadband Network deployment (feasibility, design, implementation, services and maintenance), utilizing Wireless Broadband technology (WiFi and WiMAX).
- **PowerConnect™ Services Suite** - Core services such as VoIP Digital Phone and wireless High-Speed Internet Access as well as optional add-on services such as cellular, video, guest networks, and virtual private networks.
- **PowerConnect™ Support Suite**
 - Full Service Support
 - Order Provisioning (customer activation and service fulfillment)
 - Operations Support (network management and monitoring)
 - Product Marketing (service promotion and product enhancements)
 - Customer Care (subscriber management and technical support)
 - Revenue Management (subscriber billing and collections)

For businesses, local governments, and individual entrepreneurs, PowerNet Global's PowerConnect™ platform provides a turnkey, branded Community broadband experience, including the world's most advanced carrier-grade infrastructure, allowing a customer nomadic access to high-speed Internet, digital phone and eventually digital video services, all with one account under one bill.

We are approaching a time when the Internet will be in the air all around us, wherever we go, available on a wide variety of devices. For communities that want to be a part of this new era in information technology, the PowerConnect™ Community Broadband Solution assures the Internet will be accessible, affordable and fast.

2 Opportunity

PowerNet Global, in partnership with the community of ABC County, KY and its affiliates, has the opportunity to deploy the PowerConnect™ Community Broadband Solution to significantly enhance access to High-speed Internet, Digital Phone service (VoIP), and other special applications such as Video Surveillance by building and operating and maintaining a community-wide state-of-the-art Community Broadband Network that encompasses the major residential and business entities in the county.

This community has suffered from lack of access to adequate broadband services at reasonable rates and does not have access to next generation telecommunication services such as Voice-over-IP Digital Phone service or IP-based Video.

PowerConnect™ can deliver these needed services quickly and affordably to the benefit of the community, its residents and businesses.

<i>Per 2004 US Census</i>		Population:	15,134
Area Code:	859	Households:	5,170
Major City:	FALMOUTH	Average House Value:	\$63,900
State:	KY	Avg. Income Per Household:	\$38,992
County:	ABC	Persons Per Household	2.8
Latitude:	38.675579	White Population:	14,966
Longitude:	-84.335009	Black Population:	83
Elevation:	558	Hispanic Population:	118

NOTE: As an optional pre-requisite to pursuing this opportunity, PowerNet Global can assist perspective Affiliates with a survey of the community to determine the demand for the services proposed.

3 Affiliate vs. PNG Services and Responsibilities

We know Telecommunications, you know your Community

PowerNet needs to partner with a strong community Affiliate to get PowerConnect™ services to market.

Affiliate Areas of Responsibility

- A physical storefront or local service center
- Consistent on-site management of the business including supervision of local support and administrative operations
- An aggressive marketing effort
- Computer literate local support staff and installers.
- Dedication to growing the business

In return PowerNet offers the technology and know-how to deliver the latest in next generation broadband-based telecommunications services along with these extra benefits:

- A prestigious name and recognized brand
- Administrative policies and procedures including customer care and revenue management
- Technical help desk support
- Marketing and advertising service and expertise
- Reliable and efficient Internet connectivity and related broadband telecom services

4 PowerConnect™ Community Broadband Solution

The PowerConnect™ Community Broadband Network

Feasibility and Design (30 Days)

A site survey/feasibility study assists in determining what challenges and opportunities exist that either may interfere with or enhance the design and deployment of the Community Broadband Network.

Our site survey for ABC County has resulted in the following Community Broadband Network Design recommendation (see network diagram *figure 1* attached).

Construction and Configuration (90-120 Days Inclusive)

Construction of the Community Broadband Network will take place in three main phases (Bandwidth, Backbone, Mesh), each conducted in serial order.

Each phase will start with a deployment planning session conducted between PNG, our Affiliate, and the construction contractor.

Construction of each network element will then be conducted by the contractor under the supervision of a PNG Project Manager. Following the completion of the network construction, PNG's network engineering group will then configure and test the network to ensure its readiness for commercial service.

Backhaul (bandwidth connectivity) (30 Days)

For this network, an initial bandwidth feed of 45Mbps (DS3) is recommended. Upon a successful ramp, it is recommended an OC12 (622Mbps) circuit be added to sustain growth. Based on usage averages, an over-subscription ratio of 5:1 for businesses and 12.5:1 for consumers is recommended.

WiMAX Point-to-Multipoint Backbone (30 Days)

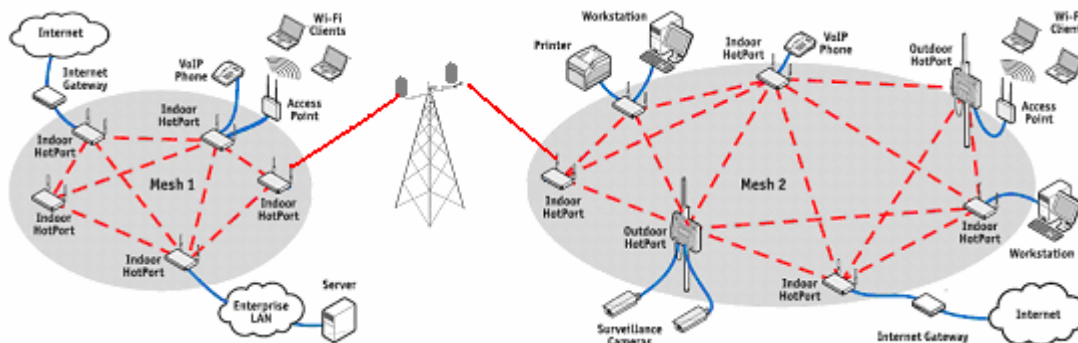
WiMAX is a standards-based Community technology that provides high-throughput broadband connections over long distances. WiMAX can be used for a number of applications, including "last mile" broadband connections, hotspots and cellular backhaul, and high-speed enterprise connectivity for business.

Typical WiMAX Backbone Performance

Range	Under 4 miles	4-6 miles	Over 6 miles
Access Point cost	\$25k per carrier-class AP	Same	Same
CPE price	\$250	Same	Same
Raw Data throughput (20 MHz channel)	75 Mbit/s	50 Mbit/s	17 Mbit/s to 50 Mbit/s (depending on link quality)
No. of business users*			
1.5Mbps (T-1)	205	135	75
10.0Mbps	75	55	25
No. of residential users*			
0.5Mbps	1552	1035	345
1.0Mbps	1000	755	135
2.0Mbps	500	345	45

*Over-subscription rate is 5x for business and 12.5x for residential. Also takes into account overhead (efficiency), which for 802.16 is 85% independent of number of users.

WiFi Mesh Client-side Network (1-120 Days Phased)



Following the deployment of the Backhaul and the WiMAX Backbone a client-side WiFi Mesh network will be deployed. It is recommended this portion of the network be deployed in three phases. Launch of each phase should coincide with agreed-to subscriber and revenue growth milestones:

1. Phase One - Seed Nodes/Key Zones (Prior to commercial launch)
2. Phase Two - Filler Nodes/Key Zones (30-120 days after commercial launch)
3. Phase Three - Expansion Nodes/Secondary Zones (After meeting key milestones)

Operation and Maintenance (On-going)

The PNG Network Operations center (NOC) uses the PowerConnect™ Network Management System to provide 24x7 insight into the real-time status of all network elements.

The PowerConnect™ Network Management System provides real-time monitoring and comprehensive, centralized management of mesh networks deployed in an enterprise or a service provider infrastructure. The system features a client/server architecture with an intuitive graphical user interface (GUI) for managing all mesh-wide and individual node settings for security, traffic prioritization, radio behavior, internetworking, and more.

The system's Multi-Mesh™ capability enables an authorized administrator to manage multiple mesh networks from a single screen. These networks can be independent, or integrated with Mesh-Bridge™ to form a single mesh environment with up to 1000 mesh nodes.

Real-time monitoring depicts a graphical view of active connections in the mesh topology, along with a display of mesh/node statistics and event/fault logs. The display can be customized by importing a floor plan, map or drawing to show the physical location of all nodes in the mesh.

The PowerConnect™ Services Suite

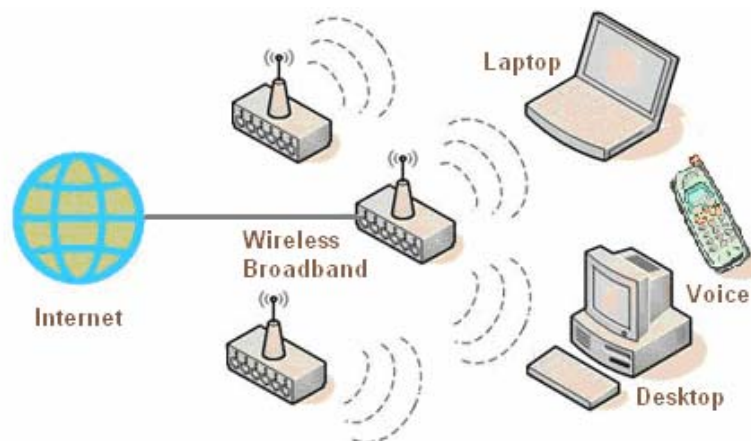
Our high-speed Internet access and digital phone plans pricing and promotions vary, depending on the community being served. They all include high-speed access at dial-up pricing, the convenience of not tying up your phone line when you're online, and the ability to surf the Internet from most anywhere in your home and your community.

Core Services

- High-speed-Broadband Internet Access
- Voice-over-IP Digital Phone Service

Add-on Services

- Guest Internet Access
- Cellular Phone Service
- Video Surveillance
- Remote Utilities Monitoring
- Private First Responder Network
- Dual-mode Cellular-WiFi Digital Phones (Coming Fall 2006)



PowerConnect™ High-speed Internet Access delivers a fast, easy and reliable means of high-speed Internet access from your home or business. We also provide exciting add-on features at no additional charge, so you get the most out of your Internet experience. However you choose to use the Internet, you won't find a faster, more reliable broadband connection including these features:

- Unlimited Internet Access
- Speeds up to 2Mbps
- 5 email addresses
- 25 Megs of Email storage
- 10 Megs of personal web storage
- Popular browser support
- Free technical support
- Gearbox Internet Connection Kit
- Slipstream Broadband Accelerator
- BSecure Internet Security Suite



Gearbox Internet Connection Kit is an Internet Connection software package that helps us install, setup, and troubleshoot a user's Community broadband connection and related Internet access service. GCK helps users get online for the first time, or for existing customers helps them reinstall their internet or successfully troubleshoot their e-mail or Internet access.

GCK benefits customer care and our network operations center by helping us troubleshoot a problem more quickly and with more detailed information than what an end user can normally provide. These include a running log of the customer's connections as well as data mismatches that Gearbox can detect. It also provides the ability to connect to the customer's computer to change settings as opposed to requiring the user to manipulate their settings themselves.

Slipstream Internet Acceleration uses patented acceleration, compression and network optimization technology to accelerate the online experience for Community broadband users, while significantly reducing bandwidth requirements.



BSecure Internet Security Suite is an all-in-one Internet protection suite for home and small office Internet users looking for full computer and family protection in one convenient package.

- Filtering Software
- Tamper Proof Reporting Option
- Anti-Virus (powered by Sophos)
- Firewall and Intrusion Detection
- Pop-up (and Spyware) Killer
- SPAM Filter

PNG provides Gearbox, Slipstream and BSecure as standard features to all users.

PowerConnect™ Voice-over-IP Digital Phone Service provides differentiated features that enable service providers to rapidly develop and deploy new Voice over IP (VoIP) offerings for the residential and SOHO (small office/home office) markets and increase ARPU. Some of the key features of the Broadband Voice offering are listed below:

Anonymous Call Rejection	Last Call Return
Caller ID	Last Number Redial
Caller ID Blocking	Malicious Call Trace
Caller Name	Outgoing Call Barring
Call Waiting	(available in Release 3.2)
Call Waiting Cancel	Parallel Ringing
Call Forward	Password Reset
Call Forward on RNA	Portal, Browser-Based
Call Forward Variable	Privacy Management
Calling Restrictions	Selected Time Special Routing
Call Logs	Simultaneous Ringing
Click-to-Call	Advanced Call Routing
Distinctive Ringing	Speed Dialing
Equal Access	Voice Mail Notification
Find Me/Follow Me	
Four-Way Calling	

Using the following Internet access devices PowerConnect™ Voice-over-IP digital phone service supports any number of configurations from cordless, to single-line to multi-line or multi-extension phone systems.

Digital (VoIP) Internet Access Device (IAD) allows users in corporate or residential environments to connect their digital phone service to standard desktop and cordless phone systems. Typically the IAD will sit between your wireless Internet access device and the phones used in the home or office.



WiFi (VoIP) Digital Phone allows users with access to WiFi networks to benefit from VoIP calling. It complies with both the 802.11b and 802.11g standards for Wi-Fi networks and supports value-added features such as VoiceMail, Caller ID and call forwarding.

- Mobility with IEEE 802.11b wireless standard compliance
- High Voice Quality with Low Communication Costs
- Travel Charger Design for Mobile Users
- Direct IP-to-IP Call and Ad-hoc Intercom Mode Support
- Support Auto Provisioning for ease of deployment

PowerConnect™ Add-on Services

Guest Internet Access

Because the PowerConnect™ Community Broadband Network delivers client-side WiFi-based connectivity it inherently provides Internet connectivity in numerous, convenient public locations throughout the community. Through a simple online credit card transaction, temporary guests to the community can have hourly or daily access to the network, so they can respond to email, chat, work and surf.

Cellular Phone Service

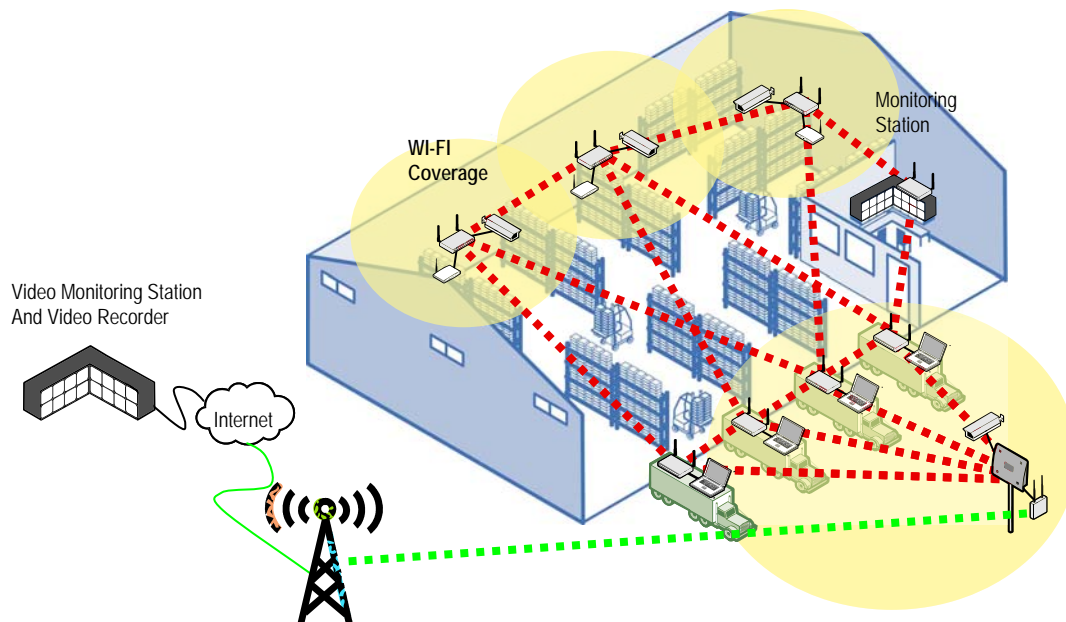
In addition to Voice-over-IP digital phone service, PowerNet Global can supplement the voice communication offering with cellular phone service from Cingular.

Our Pay-as-you-Go nationwide mobile phone offering powered by Cingular is a perfect complement to the local digital phone service.

Video Surveillance Service

PNG works with local installer partners to deploy networked video surveillance which enable enterprise-wide integrated security. These solutions deliver excellent video and audio, markedly reduce security and surveillance costs, and enable super-fast access to recorded footage.

- Connectivity for surveillance and access control
- Network is easily reconfigured when security needs change
- Even equip moving vehicles with mesh nodes to communicate wirelessly for dispatch, inventory control and related security needs



Typical PowerConnect™ Video Security Implementation

Remote Utilities Monitoring

Most municipalities own and operate water utilities, and many also own electric or gas utilities. In order to bill customers for their use of water, gas or electricity, utilities historically have sent an employee to read meters and other sensors located on each customer's property and throughout the utility grid. Instead use PowerConnect to significantly increase productivity and reduce the cost associated with meter reading and other utility monitoring functions.

Private First Responder Network

In addition to its public access capability, PowerConnect can also provide a secure wireless infrastructure for emergency first responders and public safety personnel that operates on the licensed 4.9 GHz public safety band.

Dual-mode Cellular-WiFi Digital Phones (Coming Fall 2006)



Dual-mode handsets using UMA - Unlicensed Mobile Access technology, such as the Nokia 6136 pictured, will connect seamlessly to the PowerConnect™ Community Broadband Network allowing users access to their low cost digital phone service within the community network and nationwide cellular access all in one device.

Nokia 3136 UMA Wifi-GSM Dual Mode Phone

- 1.3 megapixel camera with 8x digital zoom
- microSD card slot
- mp3 player
- FM Tuner
- MMS,
- Email
- push to talk
- 5 hours talk time, 280 hours standby time - GSM mode
- 5.5 hours talk time, 82 hours of standby time - UMA mode
- Quadband (GSM 850/900/1800/1900)

The PowerConnect™ Support Suite

PNG has dedicated personnel to provide on-going Affiliate support in each area of your business including marketing, operations, and distribution.

Product Marketing (service promotion and product enhancements)

PNG's PowerConnect™ Marketing program offers Affiliates a comprehensive array of tools, programs and strategies to streamline go-to-market efforts and ensure the successful launch and ongoing marketing of business and consumer broadband voice and data services. The core of the program consists of a comprehensive set of marketing best-practices that can be targeted toward multiple customer segments. Program objectives are:

- Accelerate Affiliate revenue by maximizing customer penetration
- Leverage proven integrated marketing tactics
- Implement proven strategies to increase ARPU (Average Revenue per User)
- Augment your internal resources with our supplemental support

All Marketing services are available on an ala-carte basis, allowing service providers to customize services to fit their unique needs. Services include:

- Business Planning Services
- Product and Launch Planning
- Trial Management
- Channel Strategy and Sales Tools
- Channel and Sales Training
- Marketing Communications
- Post Sale/Customer Retention Programs

Order Provisioning (customer activation and service fulfillment)

PNG's Order Provisioning Portal is a simple web-based ordering tool that allows individual subscribers or customer support reps to place orders and configure service features as well as collect subscriber information for billing and care.

Customer Care and Subscriber Management

PowerNet's Customer Care center is staffed 24x7 by highly skilled technicians to ensure the network performs as designed. This includes monitoring every aspect of your service, from trouble notifications; to identification of problems; and assistance with preventive measures.

- Branded Call Center support
- Call handling and incident tracking
- ISP support
- E-mail support
- Call escalations
- Radius password resets
- Monthly activities reports
- Real time web-based access to all support activities
- Round-the-clock remote monitoring of all remote network devices

Revenue Management (subscriber billing and collections)

PNG Internet Affiliate owners do not need to worry about processing credit cards or sending out invoices. Why? Part of the success of PNG's Affiliate model is its centralized subscriber management and billing system.

Many small businesses fail simply because they do not have a sophisticated enough billing system to bill their clients. As a PNG Affiliate, your business will have the billing managed for you. The PNG PowerConnect™ Support Suite includes a centralized billing department where all of the credit cards are processed, statements run and delivered and payments processed. Handling the billing centrally is just another way the PNG model allows you to concentrate on getting more customers, making more money, and keeping current clients happy.

5 The Business Model

The PowerConnect™ Program depends on a partnership between a PowerConnect™ Affiliate and PowerNet Global.

In the typical business model the Affiliate funds the non-recurring (NRC) costs related to the design and deployment of their PowerConnect™ Community Broadband Network as well as for the wholesale monthly recurring costs of PowerConnect™ Services and Support, which is provided by PNG.

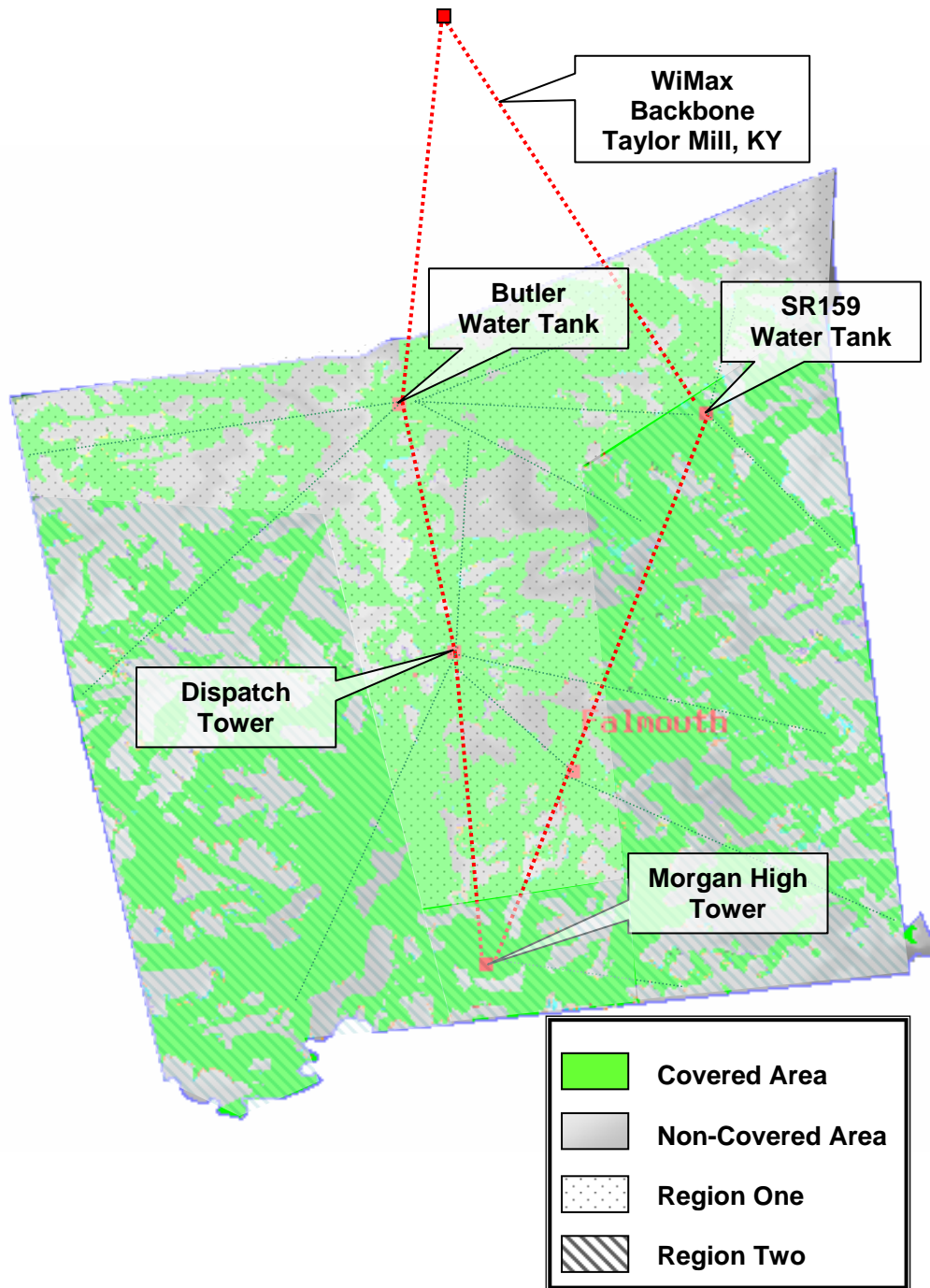
We can provide financial model template to assist potential Affiliates in understanding these costs as well as the related revenue opportunities that make up the PowerConnect™ offering.

With the exception of the PNG charges to the Affiliate as defined, all other costs and revenues belong to the Affiliate. As such the Affiliate has tremendous flexibility to leverage the PowerConnect™ network and services toward the ultimate profit potential.

6 PowerNet Global Service Fees and Terms

If you're interested in learning more about the fees and terms of our community broadband service, please contact your PNG agent or representative in your area or contact us directly. Be sure to visit our website frequently for updates and news.

figure 1 - Network Diagram - ABC County, KY - Community Broadband Deployment



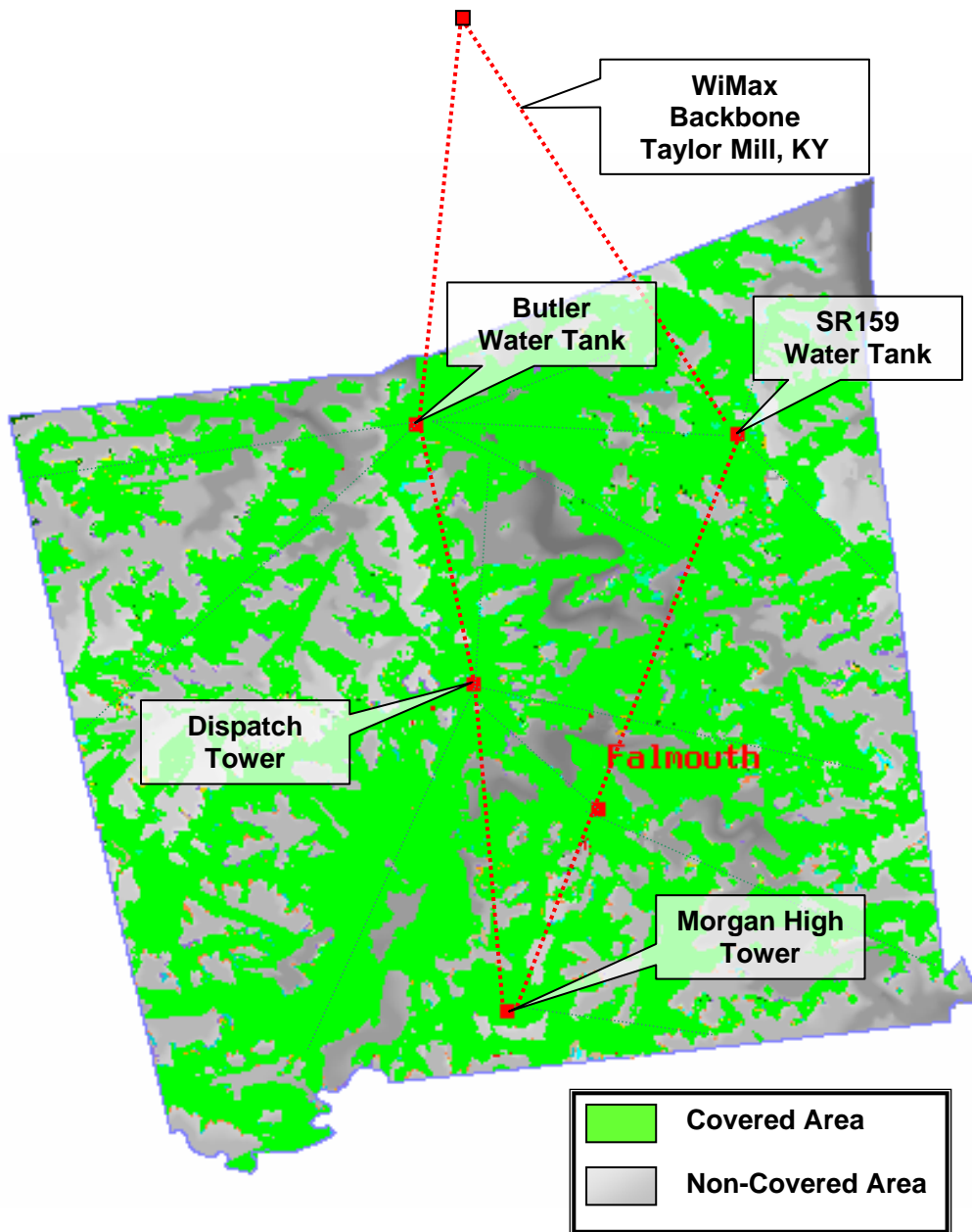


figure 2 - Coverage Map - ABC County, KY - Community Broadband Deployment