

Municipal Broadband: Why & How Public Power Systems are Deploying Fiber-to-the-Home Networks

**Congressional Briefing
Thursday, September 25, 2003**

**American Public Power Association
Desmarie Mosco, Government Relations
Representative**

Presentation Overview

- Why public power systems are providing broadband services
- What types of services are public power systems providing
- What types of technologies are being used by public power systems
- Why public power systems are finding fiber-to-the-home networks increasingly attractive
- Why it is important to allow public power systems to provide broadband services
- What are the public policy implications of public power broadband

Why Public Power Systems are Providing Broadband Services

- Economic Development
- Customers want utility to provide broadband services because:
 - They want the same quality services the utility provides to itself and/or local government
 - Lack of broadband (cable modem/DSL) service in many communities, particularly rural areas
 - Incumbent service providers are less responsive to local needs
 - At best, inconsistent customer service from incumbents
 - Service provided by incumbents is too expensive
- “The People’s Wires” – some public power customers have paid for fiber used in SCADA systems. It is their right to decide how to utilize the fiber capacity.

What Types of Services are Provided by Public Power Systems

There are two classifications of services:

- Internal – services provided to those within the utility and/or municipal government
- External – services provided to those outside the utility and municipal government

Internal Services

- Automatic Meter Reading (AMR) -- 147
- Supervisory Control & Data Acquisition (SCADA) -- 323
- Municipal Data Network -- 197
- Voice -- 90

External Services

- Cable Television -- 105
- Internet Service Provider -- 130
- Cable Modem Service -- 71
- Broadband -- 114
- Long Distance Telephone -- 33
- Local Telephone (CLEC) -- 38
- Fiber Leasing -- 144
- Wireless Network -- 30

Types of Broadband Technologies Used by Public Power Systems

- Coaxial Cable
- Hybrid Fiber/Coaxial (HFC)
- Fiber Optics
 - Fiber-to-the-home
- Wireless
- Power lines

Why Public Power Systems are Finding FTTH Increasingly Attractive

- Need for advanced communications infrastructure for core electric utility functions
- Ability to offer “triple-play” services makes FTTH systems more affordable
- Technology affords communities the ability to meet public demand for advanced communications with much greater data carrying capacity than cable modem/DSL
- Having a FTTH network makes communities/regions more attractive to businesses

Cable Modem and DSL – Big Deal!

“It is important to note here that the current generation of broadband technologies (cable and DSL) may prove woefully insufficient to carry many of the advanced applications driving future demand. **Today’s broadband will be tomorrow’s traffic jam, and the need for speed will persist as new applications and services gobble up existing bandwidth.**”

Office of Technology Policy, U.S. Department of Commerce,
Understanding Broadband Demand: A Review of Critical Issues, at 6
(Sept. 2002)

Public Power Systems that have Deployed or are Testing FTTH Networks

- Borough of Kutztown, PA
- Bristol, VA
- Provo, UT
- Dalton, GA
- Grant County Public Utility District, WA
- Jackson Energy Authority, TN
- Douglas County Public Utility District, WA
- Taunton, MA
- Palo Alto, CA
- Sylacauga, AL
- Reedsburg Utility Commission, WI

Why it is Important to Allow Public Power Systems to Provide Broadband Services

- Economic development
- Increase educational opportunities
- Regional and global competitiveness
- Telemedicine
- Telework
- Close digital divide
- Quality of life

Public Policy Implications of Public Power Systems Providing Broadband Services

- Helps achieve core goals of the Telecommunications Act to promote broadband deployment and facilities based competition
- Reduced prices for consumers
- Provide high-speed broadband to rural and isolated areas

Criticisms Made about Public Power Broadband and Responses

1. Localities should not compete with the private sector

- Localities only compete if public demands it
- Advance economic/community development goals
- Fill in service gaps or offer better service rates
- Public power communities are focusing on FTTH, which the private sector will not make available in most location for years, if ever

Criticisms and Responses

2. Regulators should not compete with the regulated

- Localities do not regulate telecom providers
- ISPs are not regulated at all
- Cable regulation is subject to federal standards and non-discriminatory master cable ordinances; cable franchises administered by City Hall, not utility
- Localities must manage rights of way in a non-discriminatory/competitively neutral manner

Criticisms and Responses

3. Localities do not pay taxes

- Public power utilities make payments in lieu of taxes that are often higher than private taxes
- Public power systems do not pay taxes because they don't have profits
- The private sector gets billions in tax breaks annually

Criticisms and Responses

4. Localities can use tax-advantaged financing

- This is a perfectly legitimate practice for public improvement projects
- BUT tax-advantaged financing is often unavailable or overrated and comes with numerous onerous burdens
- Projects today often use taxable financing
- Large cable and telcos have access to the best rates

Criticisms and Responses

5. Localities cross-subsidize communications services at the expense of electric-rate payers

- Localities are very careful to avoid cross subsidization
- Enterprise rules do not allow cross subsidization and require utilities to be financially self sufficient
- Private-sector entities routinely subsidize across products, geographic regions

Criticisms and Responses

6. Public communications projects have often failed

- This is **NOT** true
- Economic development, educational opportunity, etc. have greater monetary value for community
- Industry studies are seriously flawed
- Public projects do not need to earn profits over a short period of time

Telecommunications Act of 1996

- Primary purposes of Telecom Act
 - Restructure telecom markets
 - Promote competition
 - Encourage innovation
 - Reduce legal and regulatory barriers to entry and competition
- Sec. 253(a) – “No state or local statute or regulation, or other state or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide interstate or intrastate telecommunications service.”

Barriers to Entry

- There are currently 11 states that have erected barriers to community broadband.
- Municipalities and public power systems have challenged these barriers in court.
- ***FCC v. Missouri Municipal League*** -- the U.S. Supreme Court in 2004 will decide whether the term “any entity” in Sec. 253(a) includes municipalities and therefore precludes states from erecting barriers to municipal entry into the telecom market.

Conclusion

- Consensus all around: Truly high-bandwidth broadband is an important tool for economic development, educational opportunity and quality of life
- Key Question: How do we get from here to truly high-bandwidth broadband for all Americans as rapidly as possible?
- The private sector alone cannot get us there in the foreseeable future, particularly in rural and high costs
- Public Power Systems can now do in communications what they have done so well in the power industry for the last century -- fill service gaps and bring meaningful competition
- Public power systems should not be prevented from providing their communities with broadband infrastructure and services

www.APPAnet.org