Organization: Power Line Communications Association, http://www.plca.net

Contact Person: Keith Brightfield, (314) 554-3464, kbrightfield@ameren.com
Owen Pickett, (757) 687-7525, owen.pickett@troutmansanders.com

Topic: Broadband: Supply, Demand and the Role of Regulatory Policy

---

There are only two ways to deliver broadband Internet access service over a wireline and that is by telephone company "DSL" service or by cable television "cable modem" service, right? **W-R-O-N-G.**

Technology now exists to distribute broadband services over the electric grid using the process called power line communications (PLC). The idea is not new but the technology now being perfected makes it doable and opens up a vast potential market by using the existing electric power distribution system to offer consumers a new competitive "last mile" alternative to meet their broadband service needs.

This "last mile" service from a national system already constructed and in place can provide immediate help to policy makers in achieving the goal of expeditiously bringing affordable broadband services to all Americans. PLC can also improve and enhance the delivery of electric power. However, utilities cannot make the investment necessary to deliver these public benefits without a clear understanding of the regulatory environment in which PLC will be operated. To make all this possible, regulators must commit to a regulatory environment for PLC that will facilitate the roll-out of PLC, while preserving the rights of any affected third parties.

A number of regulatory and business issues need to be resolved to promote the roll-out of PLC. These issues include the regulatory classification of PLC, radio spectrum rules, the relationship of PLC providers to other communications and in-home networking providers, and the affiliate transaction rules. In addition, utilities and vendors must develop safety standards and interoperability standards as well as formulate policies and procedures for dealing with intellectual property issues and economic and business plan considerations. To be successful, the PLC business of an electric utility company must be treated as a different business entity, separate and distinct from its regulated utility business.

With the addition of some equipment, PLC leverages the power lines that distribute power to homes and businesses to provide new services on existing wires. Depending on the technology selected, this may comprise taps, couplers, filters and other equipment, on wires, poles, transformers and other electric distribution facilities. Taps will probably be installed on poles, at junction boxes or at other convenient locations on the electric distribution system. Taps will inject and extract communications signals and may need to interconnect with wires as well as with electronics which will in turn interface with fiber or other backhaul communications facilities. Customers will access broadband PLC services anywhere in the home without any new wiring by plugging a PLC modem into any electric outlet with a single plug that provides both electric power and the communications signal.

PLC will enhance the reliability, security and efficiency of the electric distribution system, and will create an additional competitor in the "last mile" for delivery of broadband Internet access. Additional competition from PLC broadband services should reduce the cost of broadband services to customers and increase the quality of service. Moreover, PLC is capable of providing broadband access in areas currently underserved by other carriers, supporting FCC Chairman Michael Powell's February 2002 pronouncement that "broadband deployment is the central communications policy in America."