

CenterPoint Energy and IBM Examine Innovative Ways to Use Broadband Over Power Line

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CenterPoint Energy, Inc.'s electric transmission and distribution subsidiary, CenterPoint Energy Houston Electric, LLC, and IBM are working together to explore broadband over power line (BPL) technology. CenterPoint Energy has opened a BPL technology center at one of its facilities in Houston to examine uses of BPL technology for consumers as well as utility companies. In addition, CenterPoint Energy has launched a limited pilot program designed to demonstrate the capabilities of BPL in the home to Houston-area consumers.

BPL technology is an innovative way to provide broadband services to customers, while at the same time enhancing electric delivery system reliability. An exciting aspect of this technology is a customer's ability to access, through a BPL modem, high-speed broadband Internet services over existing electric power lines with their computer that is simply plugged into any electric outlet in their home.

"This is an exciting technology to explore. We believe BPL has the potential to enhance existing electric delivery systems through the development of 'smart grid' technologies, such as automated meter reading, real time system monitoring, preventive maintenance, outage detection and restoration, as well as other potential applications," said Don Cortez, CenterPoint Energy Houston Electric vice president responsible for BPL Development. "These 'smart grid' technologies should result in improved system reliability, service and safety for



electric customers."

BPL has the potential to provide faster, more reliable Internet service and eliminate the need for communication wiring of homes, which is required for DSL or cable. This provides customers greater flexibility for using the Internet along with other sophisticated technology services. Those services, among others, could include Voice over Internet Protocol (VoIP), Video on Demand (VOD), home environment management and security monitoring services.

"Broadband over power lines is an emerging technology, which will positively impact the utilities and broadband marketplace. It is one of several technologies that can help create what we call the intelligent utility network, where energy is delivered, monitored and managed in real-time, on demand," said Bernie Hoecker, vice president, IBM Energy & Utilities Industry. "IBM's work with CenterPoint Energy on the BPL technology center and the pilot program in Houston is a prime example of partnering to innovate."

This technology is being used today in Europe and many other parts of the world. In the United States, a number of utilities, including CenterPoint Energy, have launched limited pilot programs to field test BPL. CenterPoint Energy's pilot program, utilizing second generation technology, provides BPL service to an area containing approximately 220 homes in southwest Houston. This pilot program, in which up to 50 residents can participate, will run through August 2005. At the conclusion of the pilot, IBM will help CenterPoint Energy assess customer satisfaction and the lessons learned from the pilot, and CenterPoint Energy will evaluate the potential for BPL market deployment.

President George W. Bush -- who has expressed his hope for universal, affordable broadband access by 2007 -- and state regulators across the



nation are working to encourage deployment of broadband services, and specifically BPL. Since BPL technology uses existing electric power lines, it has the potential to reach every customer that is connected to the electric delivery grid -- a marked advantage over cable and DSL broadband.

A select group of technology companies are teaming with CenterPoint Energy and IBM on both the BPL technology center and the pilot, including IDACOMM, Amperion, Broadband Energy, Cisco, Itron, Mitsubishi and PCPC.

IBM has tapped its wide range of energy industry and technology experts, as well as leading hardware and software, for both projects. For the BPL technology center, IBM Global Services assisted in the design, build and implementation of the center's technology infrastructure, displays and demonstrations, which utilize IBM xSeries servers, PCs, IBM wireless solutions and IBM Kiosk technology. For the pilot program, IBM is providing project management and support as well as ongoing assessment and monitoring of equipment usage.

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