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## Amperion's Broadband Powerline Carrier selected by American Electric Power (AEP)

**Lawrence, MA, August 30, 2011** - Amperion Inc., a provider of advanced smart grid communications solutions announced on August 29 that it was selected by American Electric Power (AEP) to provide commercial products based on its Broadband Power Line Carrier (B-PLC) technology.

The utility plans to use Amperion's B-PLC products as a replacement strategy for aging pilot wire technology in 69kV line protection and control applications. The first commercial deployment will begin in the summer of 2011 with a project that includes replacement of pilot wire systems with B-PLC and the upgrade of electro-mechanical relays with digital solid state relays from two prominent relay suppliers.

The motivations for modernizing the pilot wire protection schemes with broadband powerline carrier are improving the reliability and accuracy of line protection and reducing maintenance costs associated with pilot wire. Past pilot wire replacement often required a fiber path between stations, which had a high installation cost and required line outages to install, in most cases. The use of fiber was required to support the latest digital protection, control and monitoring schemes, such as line current differential protection and phasor measurements. But testing has shown that the new Amperion technology can also support these protection schemes, so costly fiber is not required. According to initial estimates, the capital cost of B-PLC could be as low as one tenth the cost of fiber optic communications. Another advantage of B-PLC compared to fiber is its simple and fast installation process accelerating the implementation of substation retrofit projects.

Earlier this month, AEP and Amperion signed a supply agreement to provide B-PLC systems over the next number of years. The first commercial orders have already been shipped and will be installed inside their substations later in the year.

Nachum Sadan, Amperion CEO, stated "AEP has once again demonstrated a leadership position by being the first utility to deploy B-PLC commercially. We have been developing and testing this technology for the last five years and are now ready to move on to full production."

Leveraging the use of existing transmission lines for substation communications is not new. Electric utilities have been using Power Line Carrier (PLC) technology for decades since the 1920's. Amperion is positioning its new and patent-protected B-PLC technology as the Next Generation PLC. Like conventional PLC, Amperion's Broadband PLC also leverages the use of existing transmission wires for communications; however B-PLC operates at much higher data rates at voltages of 138 KV and below.

Amperion is now taking orders for new pilot projects. Please contact Amperion for details regarding its B-PLC pilot program.

### About Amperion

Amperion Inc. is a privately held company based in Lawrence, MA delivering cost effective smart grid communications products to electric utilities. Amperion developed the Broadband Powerline Carrier (B-PLC) technology for substation communications over existing transmission lines. Holder of the foundational patents for broadband communications over power lines, Amperion has a long history of innovations and has an extensive worldwide intellectual property portfolio.

Inquiries can be directed to [info@amperion.com](mailto:info@amperion.com)

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