

China's power utility wiring nation for broadband

Nearing goal of nationwide 3-second load polling

Nation's smart grid to make US look 'archaic'

BPL will play a role in China's plan to deliver broadband to 21 million homes and businesses in multiple cities (*BPL Today*, 4/25), confirmed John Heibel of US firm Glen Canyon Partners.

His firm is charged with deploying the new network gear, but the extent of BPL is yet unclear.

The nation's electric utility State Grid is rolling out fiber as fast as it can and BPL is seen mostly as an in-premises solution for retrofitting existing buildings. But the scale of potential

deployments is staggering and the nation's been buying foreign BPL gear -- thus the impact on the BPL industry could be large.

China's big broadband roll-out plan builds on the completion of a highly-publicized Chinese pilot project called Digital City that connected 5,000 apartment buildings and used BPL for the MDU portion of the grid, Heibel explained.

State Grid is teaming with Glen Canyon and the US division of Genertec -- called GTA plus National Import Export of China.

"State Grid has had fiber optic network laying going on for a number of years and they've been piloting a number of different broadband-to-the-home technologies and last mile strategies.

"Now its time for them actually to role out a substantial number of these," Heibel told us recently. "That program was funded earlier this year in China" when they committed to the roll out. State Grid "is in the distribution and

information business. "They transmit and distribute power around the country," reported Heibel.

"They have operating groups and companies in every city and every region of China and politically it's a very interesting mixture of local authority and national mandate and planning strategies."

Glen Canyon, based in Santa Cruz, Calif has been together for about a year and a half and represents nine firms that played roles in the Chinese pilots for almost 10 years.

The firm acts as spokesman for the group and as a formal contracting office for the deployment deals, Heibel explained.

Digital City was a four-year project that started about five years ago using fiber optics and other traditional access technologies to get ISP and VOIP connectivity to homes and businesses in Shanghai and Beijing.

The broadband speed wasn't compelling at first, said Heibel, but ultimately the project was a big success including the BPL portion.

The BPL gear was supplied by South Korean BPL firm Xeline plus several firms using Intellon-based BPL gear, Heibel said.

Using existing power wires for networking was a key benefit, he added -- and the gear reached speeds from 1.5-13 mbps.

The majority of Chinese citizens live in MDUs, he reminded, and the new projects will go to big cities first -- areas with substantial existing fiber.

State Grid's business model is different from US utilities, noted Heibel, in that it's charged with deploying fiber networks on the nation's T&D infrastructure.

The firm leases some fiber to telecom and internet operators such as China Telecom, China Netcom and others, he added -- and uses the rest itself.

State Grid has around 1 million kilometers of fiber "pulled" -- or installed -- in the larger cities.

The BPL deployments were thus dependent on the existing extensive "fiber plant."

The project to serve 21 million new subscribers is targeting buildings under construction in just two cities, noted Heibel.

At least some are using Intellon-based BPL gear to carry signal from the power transformer into and throughout those buildings -- but he expects BPL to play a bigger role when the focus turns to retrofitting existing buildings.

The new buildings are each getting a 1 gbps fiber connection.

Each building has about 200 apartments on average and a variety of technologies is delivering service to individual units including BPL, FTTP, Cat-5 Ethernet cable, WiFi and 200 mbps MIMO WiFi (multiple in, multiple out).

Glen Canyon is supplying power and water meters plus the switching and routing gear and is in charge of the actual deployment of the gear, Heibel reported.

A rural BPL deployment used the HV

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Kaicom quietly rocks

US BPL market: We reported that at around \$300/box, South Korean BPL hardware firm Kaicom stood a chance of "rocking" the BPL market by the end of last year (*BPL Today*, 8/22). Last year's gone but the firm is opening a US branch and recently tallied probably the BPL industry's biggest sales numbers to date -- \$15 million from an undisclosed customer. The US firm is called Kaicom Networks and authorized the opening of its worldwide marketing, sales, distribution and customer support center in the US in late March. The sales are for the US alone and are as of April 30. Business is expected to more than triple in the next three months ...

Broadband Energy Networks gets \$3.4

million investment: Broadband Energy Networks (BEN) landed \$3.4 million from a group of investors led by New York venture capital (VC) firm 21Ventures. The money will be used "to build our activities in the BPL space, specifically in three areas," BEN Founder and CEO Lawrence Silverman told us last week. Those are: Utility applications including existing pilots and trials; Supporting BPL integrators the firm's partnered by delivering some demonstration systems, and Support for BEN's own international activities. "This is going to really enable us to do a lot of the things ...

GE, TXU & EarthLink invest

\$130 million in Current: Current Communications' latest round of investment, announced last week, clearly reflects the firm's central role in the plans for the largest utility access BPL project in the US at TXU -- a network to pass 2 million electricity customers (*BPL Today*, 12/05 -- Special Bulletin). Investors include General Electric, EarthLink, TXU and utility meter maker Sensus Metering Systems. "A substantial portion of this round is being earmarked for the TXU smart grid BPL network build," Current's Vice President of Marketing Jim Dondero told us last week. That network will be "turned up" by the end of the year, he added ...

California PUC

approves BPL rules: The California PUC Thursday voted 4 to 1 in favor of the draft BPL policy opinion submitted by Republican Commissioner Rachele Chong -- making the Golden State the second in the US after Texas to create 'regulatory clarity' for BPL. Chong's version beat out an alternative submitted by Commissioner Geoffrey Brown (*BPL Today*, 4/24) that won only his vote. California's policy generally mirrors the Texas legislature's approach enacted last year -- perhaps most importantly by barring utilities from directly entering the broadband business via BPL. Instead utilities can create affiliates to deploy the technology or team with third-party BPL integrator/operators ...

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