

## BPL fits core IBM service: transform businesses

### Texas BPL bill

**lives again:** Just when you thought the Texas BPL bill would have to wait for the state's next session in 2007, a special session called by Gov Rick Perry to address public school reform opened a window for a new shot at passing State Sen Troy Fraser's SB 21. He's a Republican from Horseshoe Bay. The Senate passed the bill and its on its way to the House. The BPL wording lets an electric utility "lease out power lines to another business to operate a BPL service or system," said Fraser. A utility such as CenterPoint Energy would likely have to spin off an unregulated affiliate to continue its BPL plans if the bill passes.

IBM sees BPL as an opportunity to help electric utilities run better by enabling "smart grid" technology, the firm's Bernie Hoecker, vice president of IBM Energy & Utilities Industry told us in an interview Friday.

CenterPoint Energy a week ago had announced IBM is the BPL integrator for the utility's pilot. IBM is running a new BPL demonstration center the firm opened last week (*BPL Today*, 7/11).

IBM's bread and butter has long been IT hardware and software but the firm puts great emphasis on its consulting services that help businesses in a wide variety of industries work smarter, more efficiently and more profitably.

A current ad campaign touts that part of the business as "the other IBM," noted Hoecker, and the firm calls its product

"business performance transformation services."

The firm's been working directly with utilities for quite a while and Hoecker has been involved in that branch of the business for several years.

He cited a recent 10-year, \$1.6 billion deal with NiSource as a great example of what IBM does for utilities.

IBM will provide a broad range of "business transformation" and outsourcing services for the Indiana-based Fortune 500 gas transmission, storage, distribution, power generation and T&D firm.

The IT firm expects to save NiSource \$530 million in operating and capital costs by streamlining legacy IT systems from a half dozen firms.

That's "hard stuff and it really mitigates your risk by having a company like IBM help you with it," he added.

To help deliver such consultancy slam-dunks, IBM bought PriceWaterhouseCoopers in October 2002 — boosting Big Blue's team of industry-oriented consultants including a "cadre" of utility experts, said Hoecker ([www.pwcglobal.com](http://www.pwcglobal.com)).

"BPL is one technology utilities are really starting to get excited about and its one component where we've seen that and it's part of our strategy to create an intelligent utility network.

"Most of the power grid technologies that a lot of these utility companies are using are either old or antiquated.

"They're not digitally aware.

"They're not two-way networks.

"What we're trying to do is really transform their businesses so that they can leverage technologies like BPL to do asset monitoring, automated meter reading, deliver internet services, demand-side management, outage management," and more.

"All that we're trying to do is help enable them to do that."

For IBM that starts with consulting — helping design or optimize existing networks.

As for playing the system operator or BPL hardware vendor roll — that doesn't fit IBM's business model.

Hoecker likes the term integrator —

## Computer automation firm blasts past IBM BPL goals

### BEN links, automates existing devices via BPL

### CenterPoint BPL lab helped 'crystallize' product line

"We were invited into the demonstration center by IBM" to deliver utility applications, reported Broadband Energy Networks' (BEN) CEO Larry Silverman (*BPL Today*, 6/20, 5/30, 12/27) in an interview last week, but the Upper Darby, Pa, firm soon broadened the focus to include a wide array of products and services that work uniquely well with BPL and provide benefits that extend well beyond just utilities.

BPL-enabled utility applications are referred to in engineering terms as doing "remote monitoring and control,"

said Silverman.

Once that's accomplished — "add a computer and some software and you can automate the system.

"Our principal effort has been to take devices that were not originally designed to be networked together, such as meters, thermostats, motors and hot water heater controls that are independent islands because of how they evolved technically — and link them together and to the internet using BPL."

Once linked, those devices can be remotely monitored and controlled and thus automated, he explained.

"When you can automate them ... you can make them more efficient and you can also match end-user demand with available electricity supply."

Install BPL-enabled remote monitoring and control across the entire electric grid and the question

*Continued on page four*

integrator of systems: hardware, software and processes plus business and industry expertise.

BPL is one more way to help do that, he added.

The Houston “BPL Technology Center is a cutting-edge facility that visually demonstrates existing and emerging ways to use BPL technology,” said an IBM document.

It shows how BPL technology can remotely close electric distribution switches to restore power after an outage.

“Picture a room with demonstrations of utility, home and business applications of BPL, including how BPL equipment is installed on a utility pole.

“Picture a BPL network room that shows how a BPL signal is transmitted over home wiring and ultimately to its electrical outlets.”

As the center develops, IBM expects more and more gear to be installed and shown, said Hoecker.

Last week’s press release listed firms such as Idacomm, Itron and Cisco as hardware contributors.

Cisco has called BPL a lost cause but could change its mind if its long time friend IBM starts buying up lots of routers and other network gear for BPL projects.

IBM wants the center to be non-exclusive to various vendors, said Hoecker.

Both box-makers being used for the pilot — Amperion and Mitsubishi — use the DS2 chipset but Hoecker declared IBM’s commitment to open standards, seeing them as technology enablers and a key to the benefits of plug-and-play.

Local computer retailer PCPC saw the BPL pilot as a chance to provide computers for users that wanted broadband but needed a new computer to go along with the service, Hoecker explained.

We’ve seen IBM representatives at just about every BPL conference that

we’ve covered since *BPL Today* started up in September and we welcomed the firm’s leadership role in Houston as a boon for our industry.

BPL follows wireless and the internet itself among creations IBM embraced to help its consultancy customers run better, said Hoecker.

IBM’s role in the CenterPoint BPL center caught the attention of many utilities, he added, based on the number of calls and emails his office got last week.

“With consultants and professional staff in more than 160 countries globally, IBM Business Consulting Services is the world’s largest consulting services organization,” the firm said.

Or in IBM’s words:

“Business transformation and industry expertise,” are the firm’s key products.

They mean “the ability to translate that expertise into integrated, responsive, on-demand business solutions and services that deliver bottom-line business value.”

## SILVERMAN: BPL shouldn’t mimic DSL/cable models

### Measuring dollar value of reliability still key question

Once BPL technology trials began to show that BPL really worked and we got past the initial “wow” factor, folks started wondering what to do with it.

“Utilities were saying, ‘well its broadband so how do other providers use and sell broadband.’”

They looked to DSL and cable modem service as a guide, BEN CEO Silverman (above) reminded us in an interview last week.

“Because 90% of utility customers are consumers,” the first reaction was to sell broadband for internet access, VOIP, interactive gaming and ultimately video on demand to compete directly with telecom and cable firms.

Since utilities have an existing and trusted relationship with their customers, winning 10-20% market share was predicted and that makes an attractive business case.

Silverman calls that “phase two” of the utilities’ thinking on BPL.

“At Broadband Energy we’ve been looking at BPL for quite a while and our focus has from the beginning been on utility applications because that was our expertise and because we like to do things that are unique and different,” said Silverman.

“The essence of competitive advantage is being different,” he paraphrased a quote from Harvard

Business School competitiveness expert and author Michael Porter ([www.isc.hbs.edu](http://www.isc.hbs.edu)).

Silverman saw that BPL offered utilities specific internal advantages that gave them an edge in building a business model and competing with cable and DSL providers.

Utility apps in the past year have gone from being “a minor footnote” to BPL to being seen as the key feature that can drive BPL deployment — at least in the US — and Silverman quoted Cinergy’s Bill Grealis in calling them BPL’s “Holy Grail.”

Silverman calls that “phase three” in the US utility industry’s view on BPL and cited Consolidated Edison’s Tim Frost as probably the leading proponent today for these applications.

Utilities are accustomed to a guaranteed return on investment. One result? They haven’t always watched costs carefully, he observed.

Then deregulation came and the importance of tracking expenses grew.

“You still see very wide variations if you look across utility rate structures,” he added.

In southeastern Pennsylvania where BEN is located, most of the cost/kwh paid by electric customers is a transmission-distribution charge, said Silverman.

“The electric ‘commodity’ is a much smaller part.

“In many states it’s the opposite and the numbers vary widely.

The upshot is that a standard cost analysis formula across the industry doesn’t exist and costs get more

complicated when utilities try to calculate the value of, for example, early detection or prediction of a transformer failure.

ConEd’s Frost has explained in detail how grid elements beginning to fail put out distinct, readable frequency noise that utilities with BPL could use to detect and replace only failing transformers, for example, and avoid scheduled replacement of perfectly good gear simply because they’d been used a certain number of years.

Yet a pragmatic utility executive we spoke to reminded that the most cost effective approach might be to just fix grid-ware when and if it breaks instead of investing in expensive technology.

The answer will only be known if failure prediction is given a tangible value and that’s what BEN intends to do in future pilots for a number of potential utility apps, Silverman reported.

The first, most basic function of grid monitoring is to notify the utility where and when an element fails, he added.

“That has value although even senior utility service staff can’t tell you today exactly how much it’s worth in dollars and cents.”

Former EPRI CEO Kurt Yeager warned *BPL Today*’s sister publication, *Restructuring Today* in August that “in a digital society the reliability of power is at least as valuable as the energy itself — but we don’t have any price signals for reliability” (*BPL Today*, 10/18).

EPRI calculated that for every dollar spent on power in America, a hidden cost of 50¢ exists representing the cost of

managing losses from poor reliability on the grid measured in lost productivity, interruption of industrial processes and spoiled inventory — among other things.

Silverman believes most utilities doing BPL deployments are starting to try to get a handle on the actual dollar value of efficiency and reliability.

A BPL-enabled AMR system could remove the need to monitor individual transformers, said Silverman, since having all meters connected to a single transformer go offline at once is a pretty clear indicator that the transformer itself has failed.

Losing the connection with all the meters on a given substation could generate a substation outage alert

“Knowing the network topology, you can apply computer intelligence,” to generate this kind of feedback and notification, he added.

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## A world of new BPL applications in four minutes?

How do you explain BPL and its benefits in a format that a visitor to the CenterPoint Energy BPL center can understand and absorb in just a few minutes?

BEN (above) answered that challenge with a four-minute animated video shown on kiosks at the center (and at [www.broadbandenergynetworks.com/BPL-apps](http://www.broadbandenergynetworks.com/BPL-apps)).

The animation shows examples of the many places BEN's targeted for its unique BPL-enabled application including commercial buildings, homes and apartment buildings, schools, shopping malls, municipal and public buildings, a factory, farms, oil wells, pipelines, wind turbines, bridges and tunnels, vacation homes, water systems, and of course utility generating plants, meters, substations and utility T&D systems and equipment.

A sailboat that we thought was for decoration showed how a cell phone on the boat could control the air conditioning in a vacation home — turning the cooling

system to a warmer setting while the boat was being used and then a cooler one when turning the boat back to shore, Silverman explained.

“Only the cow on the hill is included for decoration,” Silverman said with a smile, “although with what is beginning to be done today with RFID tags on animals, it's not too far a stretch to think that someday a farmer will be notified on his digital TV equipped with BPL that his cow has strayed off the pasture.”

The animation pops up a list over each item in the graphic of applications that BEN believes can be enabled with BPL — such as livestock feed-level monitors in bins at the farm and monitoring performance levels at the wind turbines and many others.

The animation shows visitors to the center “a wealth of new benefits that can be delivered to the community using BPL and this has become a major theme of the CenterPoint facility,” said Silverman.

“Our goal at the CenterPoint BPL lab is to focus on those unique applications that can be delivered more effectively with BPL than in any other way and then to make the benefits tangible to viewers by connecting them to things and places one finds in every city and town.

“Many of these applications enable services that can become important new revenue sources for the utility, further reinforcing the business case for deploying BPL.

“We've been told by CenterPoint executives that the applications shown in the BPL demo lab have transformed their idea of how BPL can benefit their utility, their customers and their community,” Silverman reported.

He believes the collaboration between BEN, CenterPoint, IBM, Idacomm, Mitsubishi, Amperion, Itron and others in the Houston BPL center helped create “a much greater appreciation of the potential of BPL for all concerned.”

## Amperion wins US patent for BPL backhaul, WiFi

BPL hardware vendor Amperion won its 36th US patent, the firm said last week (Patent #6,885,674).

The title reveals little — “Communications system for providing broadband communications using medium voltage cable of a power system,” but the patent “bolsters Amperion's industry leading patent portfolio” by covering key aspects of a BPL network: using BPL as backhaul over medium voltage power lines and using wireless technology to connect BPL to customers, said the firm.

That architecture allowed Amperion customers “to expand quickly, efficiently, to provide mobility and to enjoy enormous savings” in cost/connected user, said Amperion CEO Philip Hunt.

Since commercial release in 2003, the firm's gear was deployed at 15 of the 50 largest IOUs in the US, the firm reported, plus municipalities and electric co-ops.

Amperion reminded that a battle over a European patent (#EPO756785) on using frequencies higher than 1 mhz to communicate over LV, MV and HV lines

was upheld on appeal.

Siemens of Munich and ABB of Zurich challenged that patent and lost in a May 2004 court proceeding, said Amperion.

The corresponding US patent is #5,684,450.

“As was the case in recent patent defenses of Amperion intellectual property,” noted Hunt, “it is our intent to continue licensing efforts of our patent portfolio to help promote and accelerate growth in the BPL industry” ([www.amperion.com](http://www.amperion.com)).

## Computer automation firm blasts past IBM BPL goals

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becomes “now what can we do with it?”

BEN came up with three categories of products and services:

- Utility apps including demand response, meter data management, substation and grid monitoring plus other functions across the T&D network that provide direct benefits to the utility;
- Automation apps that manage energy-using equipment at end-user locations to make them run more efficiently or more effectively for customers in “businesses, industries, buildings and homes,” that Silverman calls the “built” environment, and
- Public service apps for environmental monitoring, bridge vibration monitoring, security cameras, traffic light automation and much more to provide benefits to the general public.

Benefits from utility applications have

begun to be well-recognized and in some cases such as demand response offer returns not only to the utility but to their customers.

Load management lets utilities match load with supply and cut peak demand, letting them pass some of the savings to customers via a break on their power bill.

The second group includes energy management, security and access control, air quality monitoring at facilities and plants, home security and medical monitoring and many more, Silverman reported.

These give direct and tangible benefits to building owners, occupants and end-users.

The third group Silverman calls “public service applications enabled by BPL” are found in places “that in some cases may be remote or difficult to access — but have electric service.”

These benefits aren’t meant for

specific individuals “but to the community as a whole,” such as air quality monitoring in tunnels and public stadiums and sports facilities plus homeland security and health and life safety.

Having BPL means that anywhere the power lines are broken out to feed an individual device, such as a streetlight, an IP-enabled sensor can be affordably attached, Silverman explained.

A bridge is an example of a place where phone or cable TV lines or even optical fiber might be present but the cost of cutting into it is prohibitive.

On a bridge, a BPL-enabled vibration sensor can be installed in a light fixture to report unsafe conditions and BEN’s system can alert authorities by pager, email or however they choose, said Silverman.

As the price for BPL-enabled devices begins to feel the tug of Moore’s law — an exponential growth in capability for a diminishing cost — streetlights could monitor themselves and alert the appropriate service personnel when a bulb burns out.

When Silverman lived in New York City, he was aware that guards were hired to walk the paths in central park at night to locate and report burned out streetlight bulbs as a deterrent to muggings.

That could be done automatically with a BPL-enabled system, he noted.

The security camera system in the London underground rail system was cited as a key to unraveling who caused that city’s terrorist bomb attacks two weeks ago, Silverman reminded.

Such cameras are an ideal application for BPL “particularly where you can have pan and tilt control.”

These applications and others were being discussed, tested or planned by BEN but joining the CenterPoint BPL Center helped the firm ‘crystallize’ that work into a specific set of applications that’s expected to just keep growing.

*BPL Today* readers may remember Silverman developed automation electronics for the dance floor in the film Saturday Night Fever and at famed New York City nightclub Studio 54, plus Broadway musicals, well-known international hotels and more.

He’s been automating a wide variety of utility, building and commercial applications for over 30 years and founded Broadband Energy Networks to take that automation skill into the world of high-speed networking.

That work is aimed at the day when smart buildings and homes work in tandem with intelligent appliances, smart industry processes and machinery — as part of a smart electric grid — but it must

### IBM looks ahead to BPL for triple-play

#### Broadband market still ‘up for grabs’

IBM sees BPL as a way to possibly deliver triple play services — data, voice and video — using three levels of bandwidth — 200 mbps on the MV lines, 25 mbps on the LV lines into the home and then 100 mbps networking throughout the power lines in the home.

That scenario is one of many possible approaches the firm has looked at and was shown on one of several PowerPoint slides IBM sent to *BPL Today* to help explain the firm’s interest and vision for the technology.

The broadband access market is still up for grabs, said another slide, and the US has 160 million homes.

Internet use breaks down to 50 million broadband users, 70 million dial-up users and 40 million without any internet, the firm reported.

A single broadband provider has yet to deliver high take rates, said the slide, and while the broadband mix is moving from DSL to cable, telecom firms are responding with optical fiber roll-outs.

Satellite service will be squeezed out of the competition unless it finds a way to deliver a triple play, IBM predicted.

We’ve been told inherent lag makes VOIP poor at best over satellite and while downstream video content is the service’s primary strength — upload in general is too slow to compete.

Some studies show a “strong likelihood” of customer defections from incumbent providers if they’re offered an alternative, said IBM.

Compelling content and applications will drive the next wave of broadband adoption, the firm quoted management consultancy Adventis.

Cinergy found BPL’s symmetrical bandwidth supports growing upstream demand, IBM quoted, and the utility listed that plus the ubiquitous network footprint connected to all homes and business as “competitive differentiators in their successful pilot.”

The firm listed gear needed for each arm of the triple play:

- Internet — ISP back office, authentication, email systems, web systems plus billing and credit;
- Voice — voice gateway, soft switch, feature server (we guess that means a server to handle call waiting, voicemail and the like), 911/411 services and long distance carrier; and
- Video aka video on demand (VOD) — VOD server, video encoder, application server and digital rights management.

begin today in a world where most electric meters, thermostats, motors and other devices don't know how to "talk" to each other.

One of BEN's first big breakthroughs was developing what the firm calls its C2k Automation Computer.

The device uses the Motorola-IBM-Apple Power PC chipset used by several computer vendors including Apple in its Macintosh brand — but the C2k has connections and software BEN created to tap into data ports on a wide variety of devices.

Networking firms use the term "gateway" to describe the box that connects a local area network (LAN) — within a home or business — to a wide area network such as the internet.

For most gateways it's assumed the devices on the LAN side already know how to communicate with each other via IP or a proprietary protocol, Silverman explained.

BEN's Automation Computer acts as a gateway and a translator so that devices that may only have a digital data port intended for assembly-line testing or field diagnostics, for example.

Many have a simple control interface that can be put to more high-tech automation uses than originally designed for.

Being able to tap into and use these ports is very important in the "built world," said Silverman, the world of human creations — since only a small fraction of devices in use today were made after the internet was invented and began to proliferate.

A building is expected to last 50 years, a meter 30 years, controls in buildings 10 to 20 years, Silverman reported.

"You begin to realize that there's a lot of legacy equipment out there," and it's mostly pre-internet.

Experience enabling communications to and from existing and non-IP-enabled devices puts the firm in a good position to help utilities and other businesses move gradually into the "smart" world without trashing entire classes of devices meant to last decades.

That's no doubt why IBM picked the firm to do utility applications at the CenterPoint BPL pilot and the demonstration center (*BPL Today*, 7/11).

BEN proposed going beyond the standard utility apps to address a much larger question — if you have a BPL-enabled grid, what are all the things you can do with it that benefit the entire community.

He believes a wider array of products and services would help the utility and

the industry win support for BPL from customers, executives and regulators — "the overall community.

"Because we're essentially an automation company, we look at every type of automation that can be implemented over broadband networks.

"We've been doing that for over 10 years," said Silverman, and before forming BEN, he began building the foundation of the firm's technology in projects with aerospace firm Raytheon and EPRI.

For the CenterPoint projects the firm focused on applications that can be implemented more effectively with BPL than with other broadband technologies.

"The key to that is thinking about things that are electrical," and especially in places where electric terminations are present but tapping into a phone or fiber line isn't convenient and wireless reception is poor, Silverman explained.

An electric termination doesn't have to be an outlet, Silverman noted.

A lamp post or other light fixture, power switch — any existing termination in the power line becomes a convenient/affordable place to connect via BPL.

Electrical networks are "far more extensive" than telecom, cable or cellular coverage, Silverman noted ([www.broadbandenergynetworks.com](http://www.broadbandenergynetworks.com)).

## 3 stories in 2 minutes

### Fiber triggers third

**pipe competition:** Telephone and cable TV firms are "slashing broadband prices and boosting connection speeds as the two monopoly-prone industries prepare to lock horns on multiple fronts," reported the Associated Press last week in an item picked up by Philly.com. Cable TV firm Comcast plans to boost entry-level cable modem service to 6 mbps and recent promotions saw introductory rates drop from \$30/\$45 for tier one/two service to \$15/\$30. The strategy of locking customers in by offering bundled phone, TV and data services is key now as the threat of big regional telecom firms Verizon and SBC start pouring billions into replacing copper wire with fiber-optic cables, said the report (free registration required: [www.philly.com/](http://www.philly.com/)

[mld/philly/business/special\\_packages/cf\\_biz/12126100.htm](http://mld/philly/business/special_packages/cf_biz/12126100.htm))

### Lautenberg likens

**broadband to water:** "Imagine if you turned on the water faucet but nothing came out because you were in the wrong part of town," wrote Sen Frank Lautenberg, D-NJ in an article last week in The Hill. "Broadband might not be as essential as water, but it's becoming increasingly important in our competitive global economy." Lautenberg is a member of the Commerce, Science & Transportation Committee and co-wrote a bill with Sen John McCain, R-Ariz to let municipalities provide broadband (*BPL Today*, 6/27). The Hill article explains the rationale for the bill including examples such as Scottsburg, Ind where two local businesses threatened to leave town for lack of fast internet. The city of 6,000

residents responded by installing a wireless broadband network and not only kept the two employers but attracted some new ones. See the full text of the article here:

[www.hillnews.com/thehill/export/TheHill/News/Frontpage/071305/ss\\_lautenberg.html](http://www.hillnews.com/thehill/export/TheHill/News/Frontpage/071305/ss_lautenberg.html)

### BusinessWeek

**quotes Berkman:** Not since the FCC's BPL report and order in October has the BPL world seen such attention from the general and technology press as in the last couple weeks with the double-whammy of announcements: Current's big-name investors plus IBM-as-BPL-integrator. See BusinessWeek's interview of Current Chairman William Berkman here: [www.businessweek.com/technology/content/jul2005/tc20050712\\_0116\\_20tc119.htm](http://www.businessweek.com/technology/content/jul2005/tc20050712_0116_20tc119.htm).

## Arteche: Couplers are key to putting in BPL quickly

Medium voltage couplers are the key to getting BPL equipment attached to the world's wide variety of grid architectures, Spanish coupler-maker Arteche told us last week.

The firm makes couplers that connect with a wide variety of grids of varying topologies, types of cables and diameters, overhead and underground lines, voltage levels, impedances and safety requirements.

It's "important that the main BPL

players realize that the MV couplers are key devices to be taken into account during the planning of the deployments," said a representative of the firm.

"The electrical grid must be adapted to transmit high frequency signals and the couplers are the devices that provide the suitable interface."

The firm wants to share its experience installing couplers — calling that a value-added service that helps speed installations and thus saves time

and money.

"Many business plans lose their consistency when they go to field and face the installation of the MV devices," said Arteche.

"We are committed to help our customers minimize this problem.

"This is a new focus from a coupler manufacturer," the firm noted.

Arteche pioneered capacitive couplers with silicone insulation, it reported ([www.arteche.com](http://www.arteche.com)).

## IMS sees tough road for BPL

Amid a torrent of reports on big name firms getting into the BPL field last week (IBM, Goldman Sachs, Google, Hearst Communications), broadband analyst Melissa Yocom of IMS Research reported it may all be for naught.

Substantial growth in the broadband industry in the last 18 months "helped spur speculation" on the potential success of alternative broadband access methods such as BPL and fixed wireless including WiMax, said Yocom.

"With worldwide connections soaring past 150 million at the end of 2004, it's no wonder that operators are trying to find different ways to rapidly increase market penetration, especially in the potentially lucrative rural areas where DSL and cable have yet to reach," Yocom wrote, adding that some believe BPL is the answer to rural demand.

BPL's biggest hurdle "will be achieving market share in DSL- and cable modem-saturated markets," she noted.

"The volume of BPL deployments will have to increase substantially during the next 12-18 months if this technology is going to gain any ground."

With many BPL operators "still working on trial deployments" Yocom sees "a large chance the technology may not make it off the ground."

WiMAX is thought by many to be BPL's direct competitor for the underserved rural market and could beat BPL to market, she warned — especially in the US where ratification of a universal BPL standard is yet pending.

"If the power utility sector decides to enter the broadband market by either cooperation with independent BPL ISP's or by offering their own internet services, the technology could receive the necessary financial resources and branding needed to achieve a respectable portion of the broadband market."

IMS Research is based in Wellingborough, UK and has an Austin, Tex office.

The firm calls itself "a specialist supplier of market research and consultancy services on global electronics markets," and sells its research in 35 countries (Anna Hunt, 1-512-302-1977, fax: 1-512-302-1844, [Anna.Hunt@imsresearch-usa.com](mailto:Anna.Hunt@imsresearch-usa.com)).

## Building the BPL Business Model

**NEW! Aug 19**  
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**See last page for details**

**Tell us what you think.** We want to hear from you. Send your comments, questions and suggestions about this week's *BPL Today* to [sam@ghinews.com](mailto:sam@ghinews.com).

**Abbreviations:** To see a glossary of *BPL Today's* abbreviations, go to [www.bpltoday.com/glossary.htm](http://www.bpltoday.com/glossary.htm).

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Live interactive audio conference

# Building the BPL Business Model

Friday, August 19, noon - 1:30 eastern

You can almost hear the earth moving as broadband over power line (BPL) vendors and integrators report countless utilities renewing efforts to build BPL business models that work.

In European, Latin American and some Asian utility markets a lack of telecom and cable TV may be the driving force.

In the US most experts agree utility applications are the key goal -- and utility representatives tell us they've got questions about how to tweak their business models to make BPL a winning proposition.

## Key questions explored

- Is it cost effective to predict the failure of a grid element?
- Are enough utility applications available to make BPL affordable today?
- How does a utility quantify savings BPL offers in a way that's tangible and credible to decision makers and regulators?
- Do utility applications alone justify the cost of BPL for utilities that don't want into the retail broadband game?

## Live interactive Q&A

Join *BPL Today* on Aug 19th from noon to 1:30 pm eastern and ask a panel of experts your questions about the wide variety of variables in creating the perfect BPL business model.

Find out how the unique features of your distribution grid fit with the latest BPL technology to create a "smart grid" that executives, shareholders, regulators and customers will agree benefits from being lit up with broadband.

## ANONYMITY GUARANTEED

Out of respect to the privacy of utilities considering potential BPL networks, we've made special arrangements with our conference company to keep the questioners at this event anonymous.

We expect that approach to open the event for questions and answers you might not hear at other events.

### Presented by

- Walter Adams, COMTek
- Joseph Cufari, Current Communications
- Shawn Cullingford, Shpigler Group
- Sam Spencer, *BPL Today*

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