

What does Duke Energy 'moving away' from BPL mean?
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Ambient's fixing lightning problem

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Duke Energy -- traditionally a big BPL advocate but also a tough customer that's taken years to trial BPL technology -- gave the BPL world a bitter pill in recent weeks.

The firm told another trade publication that it's "moving away from BPL" and focusing on three trials of wireless technology for its "utility of the future" program.

The report was published several weeks ago but went unnoticed by us until we saw an excerpt late last week (www.platts.com, search "Duke BPL").

A Duke spokesman returned our call yesterday and confirmed the contents of the story including characterizing the IOU's position as "moving away" from BPL.

But what does that expression mean?

The firm isn't saying it won't expand its use of BPL at some later date, the spokesperson told us.

But the wireless trials in Charlotte and Greensboro in North Carolina and Cincinnati are getting the attention of the smart grid team right now.

And the firm hopes to expand those wireless trials if they prove successful.

Duke's two Charlotte BPL trials are still in place and the larger one -- Ambient's deployment to pass 6,000 homes, is still being rolled out, the BPL firm's CEO John Joyce told us yesterday.

The IOU cited troubles with BPL's reliability including but not limited to a susceptibility to problems from lightning.

Wireless, the IOU told us, avoids such problems.

The answer to the lightning problem, said Joyce, is switching from Ambient's inductive couplers to capacitive couplers from Spanish firm Artech.

That switch was approved by the FCC (BT, 9/11) but pushed back the installation schedule about 10 to 12 weeks, he added.

Ambient continues to use its inductive couplers on the underground portion of the Charlotte deployment and will soon have a redesigned version for overhead deployments that can handle lightning, the firm told us.

Joyce is confident Ambient will prove to Duke that BPL has an important roles to play in the IOU's future plans including last mile connectivity plus backhaul for wireless gear where it's needed.

BOTTOM LINE: We've said all along that hybrid networks make sense. Utilities aren't looking for a silver bullet. They want technology that's completely reliable and solves each of the varied problems they face.

A "toolbox" of solutions is the likely answer. We worry that wireless solutions in many cases may not offer a long-term, robust and secure answer -- but we also believe utilities won't move ahead with BPL solutions until those firms are truly convinced that all the bugs are worked out of the technology.

It's good to see Ambient responding quickly and effectively to the lightning problem. And while it's disconcerting to know that such a weakness was discovered in the field at what seems to us like a late date -- it's what trials are for, putting technology to the test.

So Duke may be playing a little hardball here, lighting a fire under its vendor with a reminder that it's not married to BPL.

This is what we believe will happen. Utilities are going to start to get their smart grids up and running including the majority that are choosing wireless technology today.

They will be pleased and amazed by what they can accomplish -- as will customers and regulators who will start demanding more applications to help customers conserve energy and save money while letting utilities control demand.

This will lead to time-of-use rates and the need for instant feedback meaning a customer will expect to see a change in his/her power use show up on a website or smart thermostat within minutes or seconds.

For firms with millions of meters, one read/minute for example will require lots of bandwidth that's not now being planned for except by utilities such as Oncor and CenterPoint.

Oncor's rolling out plenty of bandwidth now and CenterPoint's utility-grade BPL system can be upgraded for more bandwidth by simply adding more signal regenerators around the grid.