# Sudden split on SEP 2.0 derailing utilities' AMI plans

A schism opened Sunday among ZigBee Alliance members that could delay or even scuttle utilities' implementations of internet-based Smart Energy Profile 2.0 (SEP 2.0) communications among smart meters, in-home displays and other AMI-related devices, a reliable source with knowledge of the situation told us Wednesday, speaking on condition of anonymity because of the situation's volatility.

"This was a blindsiding, and the trust has been broken among a number of people," the source told us. Such an occurrence "is just unheard of, uncalled for in this current era of cooperation. It's a big deal."

ZigBee Alliance officials Bill Chase, Bob Heile and Tobin Richardson did not respond Wednesday or yesterday to phone calls seeking clarification of the situation.

At Sunday's meeting, a vote was scheduled to approve how SEP 2.0 will handle communication using the HTTP and TCP/IP protocols that form the basis of the internet. Using those protocols "would allow almost any kind of internet-enabled device to interoperate with SEP-compliant devices," the person close to the situation told us.

But without prior notice, some participants -- who until then had supported that approach – "raised objections to the methodology that had been agreed to and that they had been working on," the person said. The breakaway participants put forward "an old technology, not internet-compatible, that had been brought up" 1.5 years ago, the source said, declining to be more specific about their alternative proposal.

The change in loyalties caused the proposed measure to fall short

of the two-thirds vote needed for passage. That in turn caused utilities to call emergency meetings, even later the same day, the source said. It meant "you've got [utility executives] describing to their CEOs how a year and half of work" has suddenly been thrown into question and "how it may delay smart grid deployment based on that technology."

Utilities are already implementing trial, or beta, versions of systems that rely on the protocols that were expected to be approved Sunday, the source said. "A number of them are scrambling to figure out how to quickly arrive at a compromise."

The political motivations of the breakaway contingent, if any, are unknown, the source said, declining to name any of the dissenters.

[Comments]

# On wireless front, SGIP delivers 'everything a system designer needs'

The Smart Grid Interoperability Panel (SGIP) this week finished an analysis of wireless smart grid communications and, to comply with its own current procedures, officially approved meter-upgrade standards completed some months ago, SGIP administrator Erich Gunther told us Wednesday.

The wireless-communications analysis, a product of the SGIP focus area known

as PAP 2, "covers requirements for wireless-based smart grid applications, very comprehensively," Gunther said. "Basically, it's everything a system designer needs to know to begin the analysis and technology-selection process to support one or more smart grid applications. It's very technical, describing key attributes such as bandwidth, latency and reliability. It is a huge body of work -- probably the most comprehensive set of documentation to come out of the PAPs."

The analysis, available on the SGIP's twiki, includes spreadsheets, software tools and models usable to simulate "several wireless environment behaviors," Gunther said. A portion of the work will be published officially as a NIST interagency report. Much of the work behind the analysis was accomplished by the Open SG organization, under the UCA International Users Group, Gunther said. PAP 2 will continue to exist in order to address "some additional elements discovered during the process," but the document as it stands meets the SGIP's requirements, he said.

Also this week, the SGIP put already-released meter firmware-upgrade

# Zpryme forecasts big growth for smart grid technology

The market for "next-generation" smart grid technology will grow to $43.3 billion in 2020, from $4.9 billion this year, analysts Zpryme said in a free three-page report publicized this week.

The report defined that market as consisting of aspects "beyond AMI, advanced T&D and networks and communications," and it said the market will be propelled by proactive home energy consumers, advances in manufacturing and engineering, cloud-based applications, renewable energy integration and EVs.

"Next-generation smart grid technologies are those that will be deployed after the first layer

of technology, such as AMI, communication systems and access networks, has been deployed," Zpryme said. Market growth for such technologies will be slow over the next five years but will accelerate rapidly starting in 2016. Australia, Canada, China, Denmark, France, Germany, Japan, New Zealand, South Korea, Spain, the UK and the US will help lead the development, the report said.

Unlike the telecom industry, no organization in the smart grid industry officially classifies technology as belonging to any particular "generation."

[Comments]

standards, the product of now-dissolved PAP 0, though a review by its architecture and cyber security committees. It also obtained approval of those standards' approval by its governing board. Some of those procedures were not followed when the meter-upgrade standards were released many months ago, Gunther said.

"We got a lot of criticism at the FERC workshop about how the PAP 0 work was not put through the proper processes," he said. Staffers at California's PUC were among those leveling such criticisms last month (SGT, Mar-28). "We did go through the processes, but they were different back then. Now we have a new set of processes, so it made sense to run through the present processes. It was basically procedural, and the outcome was not unexpected."

[Comments]

## 5 stories in 2 minutes

### AMI cutting theft in Jamaica:

Tamper-proof residential AMI has cut significantly cut power theft in several Jamaican communities, the *Jamaica Observer* reported yesterday. In some communities, as much as 90% of the power was being stolen. The account did not state by what percentage AMI had reduced the thefts. About 10% of the estimated 100,000 illegal users of power have "been formally brought into the system" through AMI, and another 20% will be "regularized" by year-end, the account said.

### NEC, Enel division join forces:

NEC and Enel Distribuzione together will undertake smart grid feasibility studies and offer products and services, especially those having to do with energy storage, they told the press yesterday. They will jointly start a pilot project testing energy storage with lithium-ion batteries developed by NEC and used within Enel's distribution network. The work will initially take place in Italy.

### Illinois city favors open AMI approach:

The city of Naperville, Ill announced a Tuesday open house for consumers to learn more about its $22 million smart grid project. The announcement emphasizes how the smart grid "will empower Naperville's utility customers with tools, options and choices on how and if they decide to track and management their energy use to fit their busy lifestyles." The event typifies an open, direct-to-consumers approach evident in Naperville's smart grid introduction -- an approach diametrically opposed to that used, with success, by other utilities in their own AMI projects (SGT, Apr-18).

### Digi International helping PowerDash:

Digi International, of Minnetonka, Minn, said PowerDash -- a maker of energy-monitoring products -- is using Digi's wireless technology to connect to ZigBee Smart Energy Profile-compliant residential and C&I solar devices. Digi's ConnectPort X2 and X4 gateways wirelessly connect PowerDash to smart meters and other devices in residential and commercial solar installations, respectively.

### GE offering software to improve grid:

GE Intelligent Platforms on Tuesday publicized Windows-based software it said utilities can use to optimize grid reliability and efficiency. Called Proficy Grid Manager, the software provides management of operations, equipment lifecycle, load and institutional knowledge, GE said.

[Comments]

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