



Unifying solutions
for the **Smart Grid**



Welcome to **Connections**, your source for up-to-date EnergyAxis news and information

In this edition:

- EnergyAxis Smart Meters are Auditable
- Register Today: New and Refresher Training for EA MS 7.0
- Now available: EA Gatekeepers, C&I meters with wireless 1xRTT WAN under cover
- New white paper: AMI for Utility Executives
- Partner Spotlight: Byram Laboratories, Inc. - 100 years of success
- Upcoming Events: APPA, NARUC, CARILEC

EnergyAxis smart meters are auditable

By Victor Sitton, Elster VP Market Management

By now you've probably read about utilities that are struggling to regain consumer confidence in the accuracy of their meters. There are threats of litigation, post deployment meter testing to "validate accuracy" and even movements to create "smart meter free" zones.

While many media and consumers generally believe that all smart meters are the same, there are significant differences in system design and implementation in terms of how the solution provides auditability and direct traceability of the meter data. Both are key to Sarbanes-Oxley compliance and to credibility with consumers.

The fundamental questions are:

- **Do TOU and register data sent to the head end exactly match what is shown on the meter display?** Yes. With EnergyAxis, the data shown at the meter will exactly match what the customer service representative sees when doing an on-request read. This helps facilitate complaint resolution.
- **Does the billing data come from a single source? Or is it compiled and calculated from multiple sources throughout the system?** With EnergyAxis, the billing data is generated at the meter and stored at the meter. The billing data output (consumption, demand, time-of-use, interval data, etc.) is directly traceable to the meter. AMI systems that use the communications module to compute billing data, may not be able to trace that data directly back to the meter.
- **How does one know that the LP data generated from the meter is the same as that made available for export at the head end?** EnergyAxis meters calculate LP data directly in the meter, and store data in tables within the meters' non-volatile memory. It can be demonstrated that such data can be retrieved via the optical port independent of the radio operation and this data can be compared with export data from the head end system.

- **Does the meter/register provide the same degree of accuracy and completeness with the communications turned on?** Yes, with EnergyAxis, register and billing data are completely independent of the communications module for all calculations and register functionality.
- **Does normal meter accuracy testing validate both the core metrology and the register function?** Yes, with EnergyAxis, register and billing data are performed in the meter. No register functions are performed outside of the meter so you can be confident that meter testing accurately reflects the complete picture.

The benefits? The EnergyAxis architecture maximizes auditability and minimizes risk of error. Accuracy tests performed on the meter are valid for the register data because no calculations are done outside of the meter metrology.

EnergyAxis communications are independent and interchangeable. This enables the utility to upgrade communications modules and change out technology for security, performance or cost-without any risk to the meter register functionality. EnergyAxis core metrology and the billing register are also remotely upgradeable to support future flexibility, but are handled separately from the communications module.

For more information, contact your Account Executive or [Elster](#).

Register Today: New and Refresher Training for EA_MS 7.0*

Mark your calendar and sign up today. Four full days of training in the Elster Training Center in Raleigh will accelerate your team's performance and ability to leverage new and existing functionality in EnergyAxis.

Dates: August 2-5, 2010 (Monday - Thursday, lunch provided)

Location: Elster Solutions Training Center, Raleigh, NC

Cost per attendee: \$2750 USD; class size will be limited to NINE participants

Agenda: Visit <http://energyaxis.com/training> for complete details.

In addition to system overview, sessions include administration, navigation, element/meter setup, on request reads, schedule setup and monitoring, gatekeeper synchronization, troubleshooting, billing & demand, TOU, LP, water, disconnect and other topics.

Who should attend: You could benefit if you...

- Had training, but haven't used many of the features of EA MS in a long time
- Want to refresh your understanding of long-time features and learn more about the new features in EnergyAxis 7.0
- Were trained "on the job" and want to expand your skills
- Are a new user at a utility with an existing system

Instructors: Sessions will be taught by experienced Elster training staff and include substantial hands-on exercises with applicable hardware as well as software.

Seats are limited, so register today. <http://energyaxis.com/training>

*This is a new training opportunity for existing EnergyAxis users; Elster will continue to provide on-site training services to new customers.

Now available: EA_Gatekeepers, C&I meters with wireless 1xRTT WAN under cover

After extensive testing and with hundreds of devices deployed using the new wireless WAN Interface Cards (W-WIC), Elster is ready to fill your order. This new wireless WAN solution from Elster applies additional security to the WAN communications as well as being exceptionally easy to deploy. It fits under the cover of the Elster A3 ALPHA meter, so it can provide point-to-point communications for individual C&I meters as well as WAN backhaul for EA Gatekeepers.

This is another example of Elster's multi-technology communications architecture at work for our customers. Whether communicating directly with an A3 ALPHA meter or with a multitude of network devices through a gatekeeper on the controlled mesh network, the EnergyAxis Management System manages all network elements. This flexibility enables EnergyAxis to accept and support a wide range of current and future communication technologies-enabling utilities to evolve their smart grid communications strategies over time.

EnergyAxis WICs are currently available using the 1xRTT protocol certified for use on the Verizon network.

For more information, contact your Elster Account Executive.

New whitepaper: AMI and the Smart Grid: Key points for utility executives

Utility executives are about to be inundated with the explosion of new applications and associated data that will be generated by the smart grid. AMI is integral to the smart grid, bringing terabytes of data of varying timeliness and value to the utility to enable more effective and intelligent operation of the grid.

This paper, by Elster SVP for Systems and Products David Hart, focuses on how AMI systems are impacting utilities, some marketplace trends, as well as some concerns about how utilities will be able to cope with and benefit from the wealth of data made available by AMI.

[Download the white paper](#)

Partner Spotlight: Byram Laboratories, Inc. - 100 Years of Success



Congratulations to our long-time partner, Byram Laboratories, on their 100th anniversary. Byram Laboratories and Elster, through its Westinghouse lineage, have been working together from the very beginning. Our relationship is stronger than ever, and together we are well positioned to provide solutions for the Smart Grid.

Byram Laboratories is a value added reseller (VAR) and an AMI/Smart Metering service bureau for Elster Solutions, serving utility, commercial, industrial, and multifamily residential buildings with the same advanced metering infrastructure that major utility companies

utilize. Through this service bureau offering, Byram Laboratories manages the Elster EnergyAxis Management System, allowing utilities to benefit from the Smart Metering solution implementation without having to invest in additional IT or network resources for system operations. This approach simplifies pilots or initial phase deployments as well as offering a long-term managed network approach option.

Byram Laboratories offers a number of additional solutions incorporating Elster metering products, such as an Integrated Test Switch Socket Assembly for use with the Elster A3 ALPHA, a socketless Smart Meter solution incorporating the REX2, and a multi-meter Smart Meter solution incorporating multiple REX2 or A3 ALPHA meters in a single enclosure.

For more information about these solutions, please contact your Elster representative or visit www.byramlabs.com.

Upcoming Events

- APPA National Conference, June 20-23, Orlando, FL
- Survalent Technology User Group Conference, June 21-25, Niagara Falls, Ontario
- NARUC Summer Committee Meetings, July 18-21, Sacramento, CA
- CARILEC Engineering Manager's Conference, July 26-29, St. Maarten