



Unifying solutions  
for the **Smart Grid**



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

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## Elster Solutions combines EIS and Elster Electricity

Since its founding, Elster has built a reputation on providing innovative solutions to the utilities around the world. The utility industry is undergoing significant change, which has created demand for enhanced solutions to enable the Smart Grid. In support of our customers and partners, we have expanded our technology, product, system, service, and partner solution offerings to reflect our industry's need for smart grid solutions. To better respond to our customer and partner needs going forward, we are combining Elster Electricity and Elster Integrated Solutions into a single organization named Elster Solutions.

Elster Solutions offerings span the Smart Grid value chain and include our EnergyAxis Advanced Metering Infrastructure (AMI) system with over 3.5 million points in operation, meter data management (MDM) and energy management software (EMS) through our EnergyICT subsidiary and other technology partners, OEM metering platforms for integration with third party smart metering systems, Advanced Grid Infrastructure nodes, standard metering products for traditional revenue metering applications, and support services for these capabilities.

Elster Solutions will continue to operate under the same management with a focus on customer service and operational excellence. We will continue to deliver the highest quality products, systems, and services upon which we have built our reputation. To support smart metering and smart grid deployment growth we have also enhanced our offerings, increased manufacturing, added additional staff, and improved processes allowing us to respond even quicker to customer and market needs.

As our industry continues to change, Elster Solutions will continue to innovate new and exciting solutions that will help utilities deliver reliable, cost effective service to their customers.

## David Green Joins Elster Solutions



David Green has been named Executive Vice President Customers & Markets, North America for Elster Solutions, Raleigh, NC. In this role David will help Elster drive additional growth of its smart metering and smart grid systems solutions business.

Prior to joining Elster Solutions, David was Senior Vice President of Customer Service & Energy Conservation at Dominion Resources. Here he was responsible for the development and implementation of Dominion's energy conservation and demand response programs, AMI/smart grid strategy, customer planning and market analysis, key account management, and customer operations activities.

David remarked, "I am excited to join Elster. It has an excellent reputation in the utility industry and a proven portfolio of smart metering and smart grid solutions. I look forward to leveraging my background and knowledge of utility operations to ensure Elster exceeds customer's expectations by delivering the best smart grid products, systems, and services to our utility clients throughout North America."

### How "Smart" Is Your Smart Meter?

Advanced Metering Infrastructure (AMI) projects are being implemented in earnest by utilities across North America and throughout the world. With our industry's momentum, smart metering has garnered a great deal of interest by local and national media who often refer to "smart meters" as any meter with embedded communications technology for remote meter reading. However, all so-called "smart meters" **are not** the same.

In general, there are two very different technical approaches used in today's AMI systems. In "smart meter" systems like Elster's EnergyAxis® System, Itron's Openway® System, and Landis + Gyr's GridStream system the meter's metrology engine creates and stores all billing related data in the meter's memory in ANSI C.12.19 data tables. This stored data is used to generate **all** measured quantities including billing register data (e.g. consumption and demand) and interval usage data. The smart meter's embedded communications technology is used simply as a pass-through "pipe" to securely transmit the meter's stored data to the utility.

The "smart meter" approach assures that all meter data is available locally through an optical port even if the remote communications is inactive and billing values transmitted remotely to the utility head end will match the values stored in the meter. This provides an auditable path for billing data between the meter and the values reported at the utility head end system which we believe regulators view as a strong positive.

In the "dumb meter" systems provided by certain AMI vendors, the meter's metrology performs the core measurement function, but more sophisticated billing data such as interval data and Time of Use (TOU) billing data are calculated externally to the meter's metrology from basic usage measurements provided by the meter which are then stored in the communication module.

This creates an audit challenge for utilities, as local access to meter data through an optical port **is not** an option with some systems. In other "dumb meter" systems that provide optical ports only a portion of the meter data is available while other data is stored in the communications board or calculated at the head end system. Because some values, such as TOU or interval data, are derived instead of being passed through directly from the meter's memory, there is a risk that meter data might not match the data at the system's head end. This is certain to cause a concern with regulators if customers begin questioning the accuracy of the bills created from "dumb meter" system data and there isn't an auditable path for the billing data.

Aside from potential issues with the data integrity, the "dumb meter" approach also discourages the use of industry standards such as ANSI C.12.19 by splitting metering functions between the communications module and the meter.

In conclusion, we strongly encourage utilities to explore every facet of a "smart meter" system before deployment including the system's approach toward metrology. The consequences of the wrong system approach could have lasting impacts on utilities and our industry as a whole.

For more information on this topic, contact [Michael Longrie](#), Director Product Marketing, Elster Solutions.

## Update on ARRA Stimulus Grant



Ed Gray  
VP Regulatory Affairs

Media reports and information on the DOE ARRA [website](#) suggest that a large fraction of the DOE contracts have been finalized (more than \$2B of the total \$3.4B). However, Elster's involvement in many details suggests that far fewer of the contracts are finalized than reported.

For example, a 'Buy American' waiver application requires documentation of the process used by the utility to justify the waiver. This includes a detailed comparison of the foreign origin products versus American made products in terms of quantities, costs, delivery schedules, and a market survey of alternatives. The detail required includes the names of companies and individuals contacted, including name, address, email address, and telephone number, along with a copy of the written replies.

DOE's reporting requirements go well beyond anything needed to show how the money is spent and what progress is being made. For example, the DOE wants a distinction made between jobs added and saved against a justified baseline, and a detailed jobs breakdown into a number of Department of Labor categories. The question of monthly reporting for some categories previously mentioned by Elster has been referred to the White House Office of Management and Budget; an OMB decision has not been made as of this writing. Should any utility need support, Elster stands ready to help its customers in understanding the ARRA requirements.

## EnergyAxis Awards! Nominate your project today!

Elster's new annual awards program will recognize the "best" EnergyAxis projects each year. Award Categories include Innovation, Customer Service, Results, Collaboration, and Green projects. Even new EnergyAxis customers and new projects can compete - not all categories require "results."

Utilities and Elster partners are eligible to participate and can nominate themselves or work with an Elster "sponsor." The deadline to submit completed nomination forms has been extended to January 22.

Winners will be selected by an outside panel of experts and announced at the EnergyAxis User Conference on February 22, 2010.

Visit [www.energyaxis.com](http://www.energyaxis.com) for more information on the simple nomination process or contact [Barbara Lehenbauer](#)

## Upcoming Events

[EDA EDIST Conference](#) - January 20th - 22nd  
Markham, Ontario

[Smart Energy Canada](#) - January 31st - February 2  
Toronto, Ontario

[TechAdvantage Conference and Expo](#) - February 11 to 15  
Atlanta, Georgia

## 2010 EnergyAxis User Conference, February 21-25, 2010, Charleston, SC



Make your plans now to attend! Check out our agenda and register today at [www.energyaxis.com](http://www.energyaxis.com)

**Relevant sessions for everyone in your utility!** The Smart Grid touches every aspect of a utility and we have structured the 2010 EnergyAxis user conference to focus on delivering the smart grid. Whether you are in executive management, customer service, corporate IT, communications, distribution operations, field services, or a day-to-day user, we are certain you will find this year's conference extremely worthwhile.

**Keynote speakers** Ms. Tammy McLeod, Chief Customer Officer from Arizona Public Service, Dr. Jerry Mechling, Author of "Eight Imperatives for Leaders in a Networked World" and lecturer in public policy at the Harvard Kennedy School, and Nigel Hosein, President of the Caribbean Electric Utility Service Corporation (CARILEC) an association of electric utilities, suppliers, manufactures and other stakeholders.

**New workshops. More training.** In addition to EA\_MS (MAS) training on Thursday, Feb 25, there will be hands-on [workshops](#) on analyzing WAN options, gatekeeper (collector) site selection and installation, network troubleshooting, outage management, gas module installation, and others. Plan to stay one more day for the in-depth information that can make a difference.

**Integrated technology demos and exhibits.** Exhibits this year will emphasize how each solution integrates with EnergyAxis to help solve the challenges utilities face. With more [exhibits](#) than ever, you can discover a wide range of smart grid solutions that will work with your system.

**Share the experience.** Bring a guest and register them for events like golf, tours of historic Charleston, and a great hotel in the heart of the old town shopping and tourist area.

**Questions?** Contact [Barbara Lehenbauer](#) or [Bernadette Corrigan](#).