

# *Newsletter // January 2011*

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### **Meet ESNA and its members at the following events**

- [01-02 Feb. 2011; IIR – Slimme Energie Architectuur in Breukelen NL](#)
- [08-09 Feb. 2011; IET – “Connecting Renewable Energy to the Grid” in London UK](#)
- [15-16 Feb 2011; Smart grid America Forum II, Washington DC](#)
- [23-24 Feb 2011; Smart Cities – Moving from strategic vision to implementation in Rotterdam NL](#)
- [08-09 March 2011; IQPC – Utilities Uncovered Europe 2011 in London UK](#)
- [14-15 March 2011; SMI European Smart Grid Cyber Security 2011 in London UK](#)
- [16-17 March 2011; ACI – Smart Grids: Vision, Strategy, Implementation in London UK](#)
- [16-18 March 2011; AT-Unicorn – Asia Power T&D Summit 2011 in Beijing CN](#)

- [21-24-March 2011; Terrapin – Smart Electricity World Singapore](#)
- [22-23 March 2011; MarketForce – The future of Utilities in London UK](#)
- [01 April 2011; Smart Electricity World Africa 2011 in Johannesburg SA](#)
- [11-15 April 2011; SZ&W Strong Smart Grid Week 2011 in Beijing CN](#)
- [19-21 April 2011; MeteringChina 5th annual Conference & Exhibition in Guangzhou CN](#)
- [05-07 May 2011; Smart Grid Tec China 2011 in Shanghai CN](#)
- [10-13 May 2011; ISGA International Smart Grid Congress in Beijing CN](#)
- [18-19 May 2011; SMI – Demand Response & Critical Peak pricing Europe Forum in London](#)
- [31 May-1 June 2011; EIT - Smart Grids: Transforming generation, distribution and consumption](#)
- [01-02 June 2011; Smart grid Technology Concerence 2011 in San Jose, CA](#)



## Member News

### **Telvent partners with inter-regional distribution grid company of Russia to install advanced distribution management system**

Telvent will provide smart grid solutions for one of Russia's largest utility companies. Telvent announced that the Inter-Regional Distribution Grid Company (IDGC) of Centre Moscow will implement Telvent's advanced distribution management system (DMS) solution to further improve the reliability of its electrical grid. With the implementation of this smart grid solution, the utility will be able to reduce power losses and operational costs, while improving power quality.

IDGC is one of the largest utility providers in Russia, serving 11 regions throughout the central and western parts of the country. With Telvent's solution, IDGC gets full network monitoring and control in one complete system to efficiently plan, design, and operate a smart grid to better serve its vast consumer territory. To enhance its network reliability and efficiency, IDGC will integrate Telvent DMS with existing components of its infrastructure, including supervisory control and data acquisition (SCADA), outage management system and customer relationship management software. This integration will provide a visual and detailed model of the distribution network to achieve advanced network analysis, fault management and energy analysis on a local and central level.

According to Telvent's CEO, Ignacio Gonzalez, "As utilities throughout the world upgrade to a smarter grid, more emphasis is being placed on maximizing the benefits of distributed management systems. Telvent is proud to partner with IDGC and provide smart grid solutions for its 15 million customers." IDGC and Telvent began the first of a three-phase pilot program in November 2010 and expect to complete the DMS implementation by January 2012.

[To read the whole article..](#)

### **Ferranti - NCS partners smart grid leader Ferranti to exploit opportunities in deregulated Asia-Pacific energy markets**

NCS Pte Ltd and Ferranti Computer Systems N.V. have signed a Memorandum of Understanding to collaborate in the marketing, promotion and utilisation of Ferranti's MECOMS™ technology in Singapore, Malaysia, the Philippines and China (including Hong Kong SAR).

Ferranti Computer Systems, founded in 1976, is a member of the Nijkerk Group. A leading systems integrator in the Benelux, the company's key customers are companies in the transport, energy and utility industries. Its flagship product MECOMS™ is distributed worldwide through its partners.

MECOMS™ is Ferranti's end-to-end solution for energy utility markets. The state-of-the-art technology handles all major elements of utility distribution, including billing and customer care. Defining features of MECOMS™ include full integration, short implementation time, and a user-friendly interface. Based on the Microsoft Dynamics AX solution, MECOMS™ is highly customisable and well-suited for deployment in rapidly growing and fast-changing environments. Rapid economic development over the last decade in the Asia-Pacific has injected dynamism into the region's energy markets, but it has also created new challenges for the utilities industry. Deregulation is forcing gas and water companies to find new ways to manage resources and control their facilities. The collaboration between Ferranti and NCS will lead to the development of new and differentiated products that meets the new technology needs of the region's energy and utilities suppliers. The collaboration will boost NCS' capabilities and expand its range of solutions for the utility industry. Mr Chia Wee Boon, CEO of NCS Group, said, "Not only is Ferranti a technology leader in energy and utilities, its revolutionary, customer-oriented approach to the business of energy distribution is strongly aligned with NCS' focus on bringing great value to customers. NCS is pleased to be the preferred partner of Ferranti for its MECOMS™ solution."

Said Mr Alfred Nijkerk, Founding Chairman of Nijkerk Group, "We look forward to the further market acceptance of MECOMS™ in creating the Smart Utility of the future. Our collaboration with NCS is supported by the strategic relationship that both NCS and Ferranti have with Microsoft; whose focus on the utility industry is translated into the SERA architecture. MECOMS™, as a state of the art business application for the Smart Utility, complies with that architecture."

[To read more...](#)

## **Fortum – Sustainability at the core of our strategy**

Fortum's updated strategy was published in September 2010. In line with our strategy, our core operations are based on carbon dioxide-free nuclear and hydro power production and on strong knowhow in energy-efficient combined heat and power production. Our core operations offer us an excellent platform for developing sustainable solutions.

Fortum's updated strategy and mission are based on a comprehensive analysis of the global business environment. The way we see it, population growth and overall economic growth will lead to increasing demand for energy. Rising demand, particularly in the Asian markets, and the substantial volume of retiring capacity in industrialised countries will significantly increase the need for new production capacity globally.

There are huge environmental, technical and economical challenges in meeting the demand for new capacity. However, the amount of public sector funding available for these new investments is limited. This will lead to a growing need for private capita and further development of the competitive energy markets. The way we see it, all our solutions and choices must be profitable on their own; a long-term sustainable business model cannot be based on various subsidies.

### **OPERATIONS BUILT ON STRONG EXPERTISE**

Our core operations are based on our strong know-how in CO2-free nuclear, hydro and energy-efficient CHP production, and in operating in competitive energy markets. These also create the foundation for the three key focus areas of our strategy: leveraging the strong Nordic core, creating solid earnings growth in Russia and building a platform for future growth.

[To download Fortum's sustainability report...](#)

## **EATON - Leading Companies Sign Up for Big Energy Savings in 2011, EDF Climate Corps announces first 30 companies on the hunt for energy efficiency this summer**

Today Environmental Defense Fund (EDF) welcomed the first round of companies committed to cutting carbon emissions through the EDF Climate Corps program. New program participants this year include Blue Cross Blue Shield of Massachusetts, Dunkin' Brands, Facebook, JPMorgan Chase

& Co. and Microsoft. They will join returning companies such as adidas, Carnival, McDonald's, P&G and Yahoo!

Heading into its fourth year, EDF Climate Corps places top MBA students in companies to develop practical, actionable energy efficiency plans that cut costs and greenhouse gas emissions. Over thirty companies have already enrolled in EDF Climate Corps for the summer of 2011. The final deadline for companies to apply is March 18, 2011.

"With their specialized training and laser focus on energy efficiency, EDF Climate Corps fellows deliver real results for the climate and the bottom line," said Victoria Mills, managing director for corporate partnerships at EDF. "The companies already enrolled in EDF Climate Corps recognize that big savings are at stake. We encourage others to get on board in the coming weeks."

Since its inception in 2008, EDF Climate Corps has uncovered opportunities for 66 Fortune 1,000 companies to save a total of \$439 million in net operational costs and avoid 557,000 metric tons of greenhouse gas (GHG) emissions per year—equivalent to taking 86,000 SUVs off the road.

Participating companies are making these energy efficiency opportunities a reality: to date, projects accounting for 84 percent of the energy savings identified by 2008 and 2009 fellows are either complete or already underway.

[To read the whole article...](#)

## **Vattenfall – R&D report; How to find the best opportunities in the complex energy system**

It is of the utmost importance that the transition towards a low-carbon energy system is made along an effective and reasonably economical pathway where resources are used effectively. Huge values are at stake and it is of great importance for Vattenfall to seize opportunities and avoid pitfalls on this journey.

Society has set targets for the European energy system to become climate neutral by 2050. This entails a huge transformation in the energy system and major challenges for all players in the energy market in the years to come, not least for Vattenfall. To address these challenges, Vattenfall needs to have a solid understanding of the dynamics of the whole energy system. The energy system including technology, markets, policies and society – is becoming more and more integrated and consequently also more complex. Energy system operations are highly regulated and influenced by public opinion, by market design and by technology choices, but also by investments that are made and consumer choices. It is impossible to optimize only one component of the energy system without taking several others into account. If we at Vattenfall understand the dynamics of the whole energy system, we will be better suited to maintain an initiated dialogue with policy makers, seize business opportunities and, when needed, adapt to changes in an effective way.

The R&D programme Energy System Analysis is one important component in Vattenfall's work on the issue – but not the only one. As with the whole European energy system, different parts of Vattenfall interact closely and are dependent on each other. Consequently, the work with Energy System Analysis in Vattenfall is conducted across functions and markets throughout the organisation. The functions of regulatory affairs, strategy, business development and R&D all benefit from having a common understanding of the dynamics of the energy system. The analyses realised is a valuable contribution when Vattenfall's future strategy is created and when longterm price prognoses are performed. When decision is taken on what technologies and business strategies to develop further and how to find new business opportunities, the analyses are also very important.

Over the last three years, Vattenfall's competence centre CESAR (Climate and Energy System and Market Analysis) has been acting as a hub for energy system analyses to support strategic decisions in these functions. In this context, the R&D programme Energy System Analysis plays the role of initiating in-depth research projects and maintaining some long-term university relations, such as the Pathways project at Chalmers University of Technology and the Joint Program for Global Change at Massachusetts Institute of Technology.

[To download Vattensfall's R&D report...](#)

## **GEO - One size does not fit all when it comes to smart energy...**

How would you prefer to see your energy consumption? On a hand-held display, your phone, by logging in online? Homeowners are all different which is why today, Green Energy Options announced the launch of their new connected home product; the Ensemble, and a partnership with Intamac Systems. Intamac Systems has designed an online tool that allows Ensemble users to log in and monitor their energy and control appliances from anywhere in the world (handy if you've left the iron on!)

GEO, one of the UK's leading innovators in the home energy display market, has teamed up with Intamac Systems as part of an on-going product development project with a leading utility provider. Intamac's Smart Energy solution is delivered by a unique web-based, managed service platform that is fed information by GEO's latest display via an internet bridge.

The Ensemble system provides homeowners with information that can help them to reduce costs and improve efficiencies in their home; it is designed to empower consumers to make decisions and change their behaviour. The Ensemble is GEO's next generation in-home display that lets users see how much electricity they're using overall and to track up to six appliances. An Internet bridge makes the Ensemble a truly smart device – users can control the appliances via a web portal or using an iPhone app, while a 'one-touch' lifestyle button can switch all six appliances off at once.

Content is delivered in-home, by the display and online or via mobile broadband using the Intamac service. 'GEO has always known that the key to engaging consumers in their energy usage is not only to provide them with information, but to provide them with useful information via a medium that they are comfortable with,' comments Patrick Caiger-Smith, CEO of Green Energy Options. 'We started out ensuring the data meant something, we now have two online tools that work with our displays and with the Ensemble, have delivered an element of control that ensures the system is useful to the consumer whether they are home or abroad.'

[To read more...](#)

## **Telvent - China South Grid Guizhou Electric Power Company expands use of Telvent's smart grid solution**

Telvent to provide grid supervision and planning for entire nine-city distribution network  
Telvent announced that it has expanded its partnership with China South Grid Guizhou Electric Power Company. Based on the success of a previous pilot project, Telvent will now provide its Distribution Management System (DMS) to Guizhou Power's entire service territory.

With the expanded use of DMS, Guizhou Power will have the ability to integrate and display data using a single system that provides real-time advanced distribution information and more accurate calculations for planning a smarter grid. Thanks to this single-source of data, the state-owned utility will save on costs typically needed for additional software and systems. Guizhou Power will also have the ability to share critical data more easily among departments, increasing operational efficiencies and providing a more stable power supply for its 40 million residents.

According to Telvent's CEO, Ignacio Gonzalez, "Expanding our relationship with Guizhou Power is the best proof that we are providing valuable smart grid solutions for our clients. We are pleased that our accurate data and analytics have helped improve operations and we look forward to continuing this partnership."

[To read the whole article...](#)

## **GÖRLITZ - SAP Software Solution Partner**

Officially confirmed: GÖRLITZ is SAP software solution partner. This confirms the high integration competence and quality of GÖRLITZ products, the Koblenz specialist for metering.

All GÖRLITZ software products allow a smooth integration in SAP systems. For quite a long time, GÖRLITZ customers have estimated the direct and uncomplicated alignment to their SAP-billing systems via standardised interfaces. "Our software makes SAP systems even more efficient and productive. We are pleased, SAP is now recognising this," states Olaf Schimpf, GÖRLITZ AG, business development..

[To read more...](#)

## **Duke Energy and ENN Group Collaborate on Green Cities Initiative**

Duke Energy and China-based ENN Group announced an agreement today to collaborate on the development of technologies to help build greener cities in China and the United States. The agreement creates the Future Energy Technology Demonstration Platform and paves the way to exchange knowledge on advanced energy, building and transportation technologies. ENN is committed to the development and use of clean energy and is constructing China's first smart energy "eco-city" in Langfang, China, close to Beijing. Duke will collaborate with ENN to develop the eco city and will adapt what is learned from the eco city development as it deploys clean energy technologies. The agreement was signed by Duke Energy Chairman, President and Chief Executive Officer Jim Rogers and ENN Chairman Wang Yusuo. Chinese officials and representatives from the U.S. Department of State and Department of Energy attended the signing, which coincides with the diplomatic visit by Chinese President Hu Jintao to the United States.

[To read the whole article...](#)

## **Alliander – Amsterdam Smart City project**

Five new projects were presented during the partner meeting in December 2010. The projects are realized in cooperation with many different organisations!

[Please follow the link to a short film, because images say more than words...](#)

[Special link to the Alliander Smart Grid part of the project...](#)

[To read more of the project...](#)

## **Vattenfall - The Lindell family – test pilots in One Tonne Life**

Introducing the Lindell family from Hässelby – test pilots on our journey towards a climatesmart future. In the unique "One Tonne Life" project, dad Nils, mum Alicja and teenagers Hannah, 16, and Jonathan, 13, will try to live within the limits of one tonne of carbon dioxide emissions per person per year. The project has been initiated by A-hus, Vattenfall and Volvo Cars. ICA and Siemens are the project's specialist industry partners.

Hannah was the first to spot the advert. "It sounded really exciting. Who wouldn't want to live in a climate-smart house with solar cells, green electricity and an electric car in the driveway?" she asks animatedly.

The rest of the family immediately caught her enthusiasm. "We've always liked adventures and challenges, and working out a climate-smart lifestyle is just about the most exciting thing imaginable. We're getting the chance to gain unique expertise for ourselves at the same time as we inspire others," says family father Nils.

The Lindell family were chosen in tough competition with more than 50 other families, and they have now moved into the newly built "One Tonne Life" house on Älghagsstigen in Hässelby, just outside Stockholm.

[To read the whole article...](#)



## Market News

### **Onzo - The effectiveness of smart metering will depend on key decisions**

Joel Hagan on how the opportunities of smart metering could be lost if the right decisions are not taken over the next ten years

There is widespread anticipation about the benefits of smart metering. Consumers will get timely and accurate bills and have the tools to manage, understand and reduce their energy consumption; utilities will have reduced billing costs and can benefit from enhanced customer engagement. But, there are many decisions along the way that could impact these outcomes.

Here is a dystopian picture of the future in which a catalogue of wrong turns and missed opportunities has rendered the smart meter roll out ineffective.

It is 2020 and Smart Metering hasn't been rolled out across the UK. It all went wrong. Why?

The energy select committee reviewed the government's plans for a mandated smart metering roll-out. They were very critical of the mandating of energy displays as the sole means of providing information to the customer, noting that a piece of paper was a much cheaper universal requirement, and that the competitive market should be left to fight over web services, displays, and information through smart phones, etc.

[To read the whole article in the Guardian...](#)

### **Accenture Smart Grid Solutions: Services Overview**

The need for innovative approaches to managing the world's transmission and distribution (T&D) networks has never been more pressing. As power usage continues to increase amid volatile market prices, consumers and utilities alike are searching for fresh ideas on how to conserve energy, ensure reliable delivery, enable new services and enhance environmental stewardship—all leveraging a power grid that's already strained by the demands of modern society.

Transformational, comprehensive solutions—many of which are enabled by “smart” grid technology—are helping utilities and communities around the world advance toward a radically different landscape for meeting their energy needs. Accenture offers the world-leading expertise that utilities and their customers need to frame their vision of a smarter grid and then achieve its many benefits.

Smart Grid Solutions Overview Accenture is at the forefront of the transformation to a smarter grid, helping utilities and communities around the world advance toward a radically different landscape for meeting their energy needs.

[To download this brochure...](#)

### **Frontier – Report; Competition and entry in the GB electricity retail market**

The electricity retail market was liberalised over ten years ago. Interest in this market has increased over the last few years, with some suggesting that competition is not fully effective. We were asked to provide an independent view about the level of competition in this market, and provide options that could be taken to promote further entry. We believe that the market is competitive. However, as we would expect in a market that is characterised by high risk, a large capital requirement and substantial Government and regulatory intervention, some barriers to entry remain. Although there are actions that could increase entry, they often distort the market and have an associated cost. Policy makers therefore need to be sure that the benefit from new entry can reasonably be expected to exceed all costs that may come with its promotion.

Both Government and Ofgem have completed detailed investigations of the electricity retail market in recent years. Neither found any evidence of collusion in the market. Further, the returns the

companies were making were often low and sometimes negative. Competition in this sector, both by number of suppliers and customer switching rates, also compares favourably with the rest of Europe. However, although there has been new entry, barriers preventing new suppliers entering and expanding were identified by Government and Ofgem. In addition, Ofgem is currently undertaking a further review of the market<sup>1</sup>.

[To download this report...](#)

## **FERC Study identifies tools to help ensure grid reliability**

The Federal Energy Regulatory Commission (FERC) today issued for public comment a study that seeks to ensure reliability for consumers by identifying tools that will help manage the planning and operations of new generation resources into the nation's electricity system. The study, conducted by the Lawrence Berkeley National Laboratory with a team of power system experts, and initiated and funded by FERC's Office of Electric Reliability, examines what is known as the frequency response of the bulk power system. Frequency response measures how the system performs in responding to a sudden loss of generation that could cause reliability problems such as blackouts. The purpose of the study is not to determine how much of any particular resource can be reliably integrated into an interconnection, but to develop an objective methodology to evaluate the reliability impacts of varying resource mixes including increased amounts of renewable resources. The study accomplishes this objective by developing and testing tools that can be used to assess and plan for the operational requirements of the grid. "This study is valuable in that it gives us the tools to help determine how to manage operation and expansion of the grid, regardless of which resources the electric industry uses to generate power," FERC Chairman Jon Wellinghoff said.

[To read the whole article...](#)

## **PikeResearch - Smart Grid: Ten Trends to Watch in 2011 and Beyond**

During the last few months of this decade, the electric utility industry has experienced a momentous season. The business of electricity generation, transmission, distribution, and consumption has been thrust to the forefront of public discourse – as both a villain and savior – in the fight against climate change and the struggle for energy independence and security, among other global priorities. The "smart grid," the integration of new embedded computing and communications technologies into the fabric of the power network, is widely seen as the means to adapting our electrical infrastructure to meet these global needs. Basic economic justifications for technical advancements have been enhanced (or distorted) by sweeping regulatory mandates and large national economic stimulus spending plans. The reality of the smart grid is coming into focus, too slowly for some, but at a faster pace than typically seen in this industry. Existing players are transforming, new players are entering, and consumers are awakening.

[To download the report...](#)

## **Eurelectric – Position paper; Energy 2020: A Strategy for Competitive, Sustainable and Secure Energy**

EURELECTRIC, the association of the European electricity industry, has developed a position paper outlining its position on the European Commission communication "Energy 2020 - A strategy for competitive, sustainable and secure energy", published on 10 November 2010.

[To download this position paper...](#)

Harry Crijns  
ESNA secretariat