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GSGF Global Smart Grid Federation

CHAIRMANS COMMENTS

In the course of my working role in GE I get the chance to meet many utilities. The theme of efficiency in operations processes and in energy usage has consistently been raised in the top 3 priorities by the senior executives that I have met during the course of the last six months.

Why do I raise this now? Because I would be delighted to hear whether you agree or have an alternate view? The mission of the Global Smart Grid Federation is to facilitate dynamic knowledge sharing that creates a strategic benefit for our member organizations. That benefit derives from shared learning outcomes that feed back into your national constituencies, encompassing policy formulation from an industrial perspective. In turn our member organizations will hopefully make a significant contribution to the creation of economic wealth through job creation in supporting the smart grid.

Through our working partnership with ISGAN I know we will make important contributions to the full range of clean energy policy development. I know from talking to you individually that the objective of most of your national federations is to create opportunities for your SME population to develop solutions that solve real problems in our industry. So knowing what those problems are, becomes critical for the directing of resources, so they can bring added value for all parties.

Therefore coming back to my opening question: what is your view of the top issues? Please let me know through the GSGF secretariat : lcoogan@navista.net.

EXECUTIVE DIRECTOR

Monday 17th till Thursday 20th of June I had the chance to intensively interact with our members in North America. It is extremely interesting to see how the Smart Grid developments are going on over there, as technology has to serve sometimes a very different environment.

When looking at the USA, it becomes clear that the individual states differ very much in the approach of the Smart Grids in accordance with the fundamental differentiation in their energy. The primary energy sources are shifting dramatically over the last years due to the massive use of shale gas. Coal fired power plants are far less dispatched, leading to a more dynamic and less central generation pattern. The greenhouse gas emissions are reduced. However, even then more and more renewables are connected to the system. When discussing with the several stakeholders, the impact of the grids is recognized to be crucial. Only a versatile and smart grid can accommodate such a swiftly changing energy resources pallet. Furthermore, the sustainability and greenhouse gas reduction both are pushing towards a more electrification of the energy system with more applications and services.

Next to the energy resources the market organization is crucial for the development of the smart grids. Here the USA is a patchwork, with Texas for instance implementing a full retail market down to the individual customers at the one hand of the spectrum and other states still operating the system in a fully vertically integrated way. Obviously this has a major impact on for instance data handling in the grid operation.

On Thursday I had a very good interactive meeting with our Canadian colleagues. Canada has installed many smart grids demonstration projects and a large number of new, industry driven demonstrators are coming along. The Canadian system differs a lot among the provinces, with many hydro resources and firm links to the USA. The system is vertically integrated but a lot of emphasis is on demand side involvement.

I really enjoy the possibility of exchanging with the different approaches to smart grids. During the DNV KEMA workshop the value of the global approach became very clear.

Let us continue on this route and I hope to reach out to many of our members in person to further foster the international feeling.

SMARTGRIDS FRANCE BECOMES A MEMBER OF THE GLOBAL SMART GRID FEDERATION

The **SmartGrids France consortium** was created in 2012. Bringing together 9 French competitiveness clusters specialized in the field of energy and ICT, SmartGrids France has the ambition to develop and valorize the French Smartgrids branch. The 9 clusters represent 2300 actors, 1780 companies, 8000 researchers and 1462 financed projects for an investment of €5.9 billion (figures: September 2012).

The growth in electricity consumption, the decrease in natural resources and the environmental constraints push consumers to change their energy habits, and understand the benefit of smart energy management.

The Nine French business and research clusters, specialized in the area of energy and ICT have come together to form Smartgrids France in order to foster collaboration and exchange with the view of building up and highlighting the value of the French smart grid sector.

This consortium, the first of its kind in Europe, will convey the vision and the strategic orientations of the business and research clusters, which have a regional base, regarding the future of energy grids and energy management, and the notions of smart grid and smart city.

Membership in the Global Smart Grid Federation is a major step forward for SmartGrids France. It enlightens our vision for French clusters and territory actors, on the future of power grids and of their evolution based on Smartgrids and Smart City's road maps.

INNOVATIVE CITY CONVENTION IN NICE

SmartGrids France was at the Innovative City Convention in Nice on June 19th and 20th , the meeting place and think tank for the smart and sustainable city.

We took this opportunity to present the 2013 SmartGrid France awards which recognize small and medium enterprises in 3 domains.

- Smart energy management, with the company QUALISTEO as a winner
- Smart sustainable transportation, with the company CONNECTHINGS as a winner
- Smart devices for the city with the company LUXEOLE as a winner

2ND ISRAELI SMART ENERGY CONFERENCE

ISEA (Israeli Smart Energy Association) in cooperation with the Israel Export & International Cooperation Institute and Israel New Tech of the Ministry of Economy held recently the 2nd Israeli Smart Energy Conference.

The successful event which hosted local and global Smart Energy leaders, attracted great attention within the Israeli innovative start-up community and provided a unique opportunity for a fruitful interaction between large players and utilities and the entrepreneurial community.

One of the first speakers at the conference was Shaul Zemach, Director General, Ministry of Energy, who spoke very clearly of the need to move ahead with Smart Grid deployment and who compared the debate for and against Smart Grids to the debates held 20 years ago on whether to transfer the country's analog communication technology to a digital infrastructure. Yet, Mr. Zemach also made a strong comment about the crucial strategic need of a holistic approach to secure the Smart Grid, especially for isolated countries as Israel.

The attendance of the strong local ICT (Information & Communication) players, was apparent at the conference and sent a clear message that Israel plans to take the center stage in this fast growing market.

Elad Shaviv, CEO of the ISEA, said that Israel was lagging a bit behind in acknowledging the potential and progress of Smart Energy solutions, but is now quickly closing the gap. This Israeli Smart Energy Conference supplemented well to the close ties that the local community is now building around the world.

Amos Lasker, Chairman of ISEA interviewing Shaul Zemach, Director General of the Israeli Ministry of Economy

PARTICIPATE IN THE ISGAN/GSGF WEBINAR!

The Clean Energy Solutions Center, in partnership with the International Smart Grid Action Network (ISGAN) and the Global Smart Grid Federation (GSGF), is offering a webinar on Wednesday, July 10, 2013 at 10:00 AM EDT.

This webinar will feature the **Pacific Northwest Smart Grid Demonstration project**, and the development and deployment of a smart grid application called **transactive control.** This **interactive discussion** will summarize the overall efforts of the project, introduce the basic elements of the transactive control technique, and present the **preliminary results**.

- Detailed summary on this topic, including background on the panelists
- Register

Smart Grid Project Webinar Series

This is the first training webinar in the **Smart Grid Project Webinar Series**. The webinar series will feature presentations and discussions on select smart grid projects in the ISGAN global smart grid inventory. Webinar attendees will gain knowledge on baseline methodology, smart grid solutions, success strategies, and challenges addressed and/or remaining to be addressed.

LESSONS LEARNED FROM SUPERSTORM SANDY AND OTHER EXTREME EVENTS, A REPORT BY GRIDWISE ALLIANCE

The GridWise® Alliance released a report on June 6, 2013 outlining a series of recommendations to help alleviate **the effects of large scale events on the nation's electric system**. The recommendations are the direct result of a workshop convened following Superstorm Sandy during which representatives from 20 electric utilities from across the U.S.A., along with suppliers and other experts, shared their experiences and lessons learned in dealing with these events.

In commenting on the report, GridWise Alliance CEO, Becky Harrison said, "Disruptions to our power system from large scale events pose more than an inconvenience in today's digital economy. The United States depends on a reliable, resilient, safe, and secure electric power system, and when this service is disrupted the impacts are felt by all. Modernization of the grid would help to reduce these effects. The GridWise Alliance report identifies **actions that can be taken** by utilities, policy makers, emergency responders and technology suppliers **to improve the resiliency of our electric power grid during future extreme events.**"

Examples of key insights include:

- New technologies deployed on the electric grid provide utilities with **advanced remote control and monitoring capabilities**. For example, smart meters and smart grid sensors now provide utilities with visibility to actually know when the lights are off, without waiting for customers to pick up the phone and report outages.
- Advances in **weather forecasting** combined with better modeling of damage caused by these events could greatly enhance a utility's ability **to plan** their response, neighborhood by neighborhood, and get the lights back on faster and at a lower cost.
- The nation's critical infrastructure is becoming more interconnected and utilities must understand and plan for this interdependence. Many people now depend on smart phones to manage their lives more effectively. Utilizing this same cellular network for grid equipment to automatically report its status and for restoration crews working to repair the grid to communicate their efforts requires **cellular networks to be up a running** during these events.
- During Sandy, utilities received tweets with pictures of downed power lines, yet there was no way to tie these pictures to their equipment and locations. The computer systems run by utilities can be adapted to use these social media feeds to automatically update the grid's system conditions and reduce the time delay in responding.
- In New Jersey, there is a high penetration of rooftop solar, but none of this worked when the power was out to the house. New policy and operating procedures are needed in order to **leverage customer owned power sources during major outage events** like Sandy.

The full report, Improving Electric Grid Reliability and Resilience: Lessons Learned from Superstorm Sandy and Other Extreme Events, can be found at:

www.gridwise.org/documents/ImprovingElectricGridReliabilityandResilience_6_6_13webFINAL.pdf