**Interview with NES, Member OSGP Alliance, about the development of the smart grid market/industry and their participation in EM-Power Europe, Munich, June 14-16**

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1. **What do you see as the biggest smart grid industry challenge and how does NES contribute to the solutions?**

The Smart Energy Transition is the biggest challenge. Consumers, communities, and businesses in many countries have invested in distributed generation and renewables, such as solar or wind generation, but often the Distribution System Operator (DSO) and its distribution grid is not able to connect and accept this feed-in renewable energy. Many distribution networks simply do not have the capacity and/or intelligence to manage integration with distributed generation.

Knowledge is critical in driving the smart energy transition. Frequently, DSOs lack information regarding the low-voltage grid including operating data at the secondary distribution transformer level and at the feeder level. The key to success is to deploy sophisticated infrastructure which “future-proofs” the low-voltage grid by embedding intelligence which can be leveraged incrementally as the business case for change evolves and becomes self-sustaining.

The NES smart metering system is one solution that can provide the needed advanced intelligence and functionality for this energy transition. NES smart grid solutions encompass the metering infrastructure, analytics, operational and security solutions, and consulting and services to deploy sophisticated solutions in readiness for the Smart Energy Transition.

DSOs that deploy the NES AMI System can use smart meters as intelligent low-voltage distribution sensors providing extensive data and statistics about energy flows and power quality data. This includes detailed information about grid topology, power outages, equipment failures, transformer and phase imbalances, import and export energy flows, power quality data, and much more.

The NES System can utilize this data to highlight trends and identify changes in the grid before they become a problem, as well as help consumers better manage their energy use and costs. The solution can also provide visibility of the low-voltage grid topology and connectivity, as well as deliver measurements from within the low-voltage grid. This grid visibility and information can be used by DSOs to better prepare for the smart energy transition, as well as improve operational processes and have a positive impact on the quality of service for their consumers.

2. **Could you provide some background information on the current utility projects NES is involved in and what NES' contribution is to the projects?**

NES has undertaken several leading-edge projects which have helped various DSOs drive towards the Smart Energy Transition:

a. Danish utility Ravdex, uses multiple communications paths, enabled by the NES meter, to provide low-latency transmission of power quality information from the meter to an analytics back-end.
b. Linz Strom in Austria is developing leading security solutions to ensure that their smart grid remains protected from cyberattacks as its sophistication, and thus attractiveness as a target, increases.
c. Albanian's OSHEE is deploying NES equipment and NES's analytics and operational software solution to provide increased visibility of "black-box" low-voltage grid, to maintain high visibility of the meters distribution network, and keep the infrastructure operating efficiently.
d. In Poland, Tauron is continuing to deploy the NES OSGP based AMI System utilizing interoperable smart meters from multiple suppliers, bringing the total number of smart meters under operational management by NES software to more than 400K.

These projects are in addition to our on-going European projects with major DSOs such as EON (Sweden), Vattenfall (Sweden), Caruna (Finland), Konstant (Denmark) and Cerius (Denmark), numerous DSOs in Switzerland, France, Germany, Poland, Ukraine, as well as utility projects outside of Europe.

3. **What is your view related to the Open Smart Grid Protocol (OSGP) to promote and advance the capabilities of innovative solutions for utilities?**

OSGP is targeted at utilities that want a multi-application Smart Grid Infrastructure instead of a meter centric Advanced Metering Infrastructure (AMI). OSGP provides secure, scalable control networking services for any device connected to the low-voltage grid. It also supplies critical information about the condition of the distribution feeder itself, which further improves reliability and lowers operating costs for utilities and network operators. There are more than 5 million OSGP compliant and certified smart meters deployed by DSOs around the world. The benefit of OSGP is that it is proven to provide interoperability, superior performance, reliability, and security as compared with other smart metering protocols. These OSGP meters provide extensive metering and grid information, including 15 minute load profile interval measurements, power quality data, integration with home energy networks, and best in class security features.

4. **Who should be visiting the stand and why?**

Members of any Electric Utilities and DSOs should be interesting in visiting and learning more about the OSGP Alliance and OSGP. The Alliance and its members are focused on providing smart grid solutions targeted to the low-voltage distribution grid and Smart Energy transition. Any DSO looking at their readiness for this transition should review how OSGP based interoperable solutions can help them achieve this. NES and the OSGP Alliance can help DSOs accomplish the Smart Energy transition by deploying sophisticated technology solutions that will allow a measured transition, where each step is based on a robust business case and outcome. This is the optimal way to execute the Smart Energy Transition, and NES provides just the right solutions to enable this transition.

**About Networked Energy Services Corporation (NES)**

Networked Energy Services Corporation is a global smart energy leader in the worldwide transformation of the electricity grid into an energy control network, enabling utilities to provide their customers with a more efficient and reliable service, to protect their systems from current and emerging cybersecurity threats, and to offer innovative new services that enable active, intelligent use of energy.

NES was formed as a result of the spinoff of Echelon Corporation's Grid Modernization Division in October 2014. NES is headquartered in the US with R&D centers located in Silicon Valley and Poland, and sales offices throughout the world. NES' smart grid technology is used in nearly 40 million smart meters and other smart end devices around the world.

NES is a member of the OSGP Alliance, a global association of utilities and smart grid companies, which promotes the Open Smart Grid Protocol and cooperates to provide utilities greater value by enabling true, independently- certified, multi-vendor interoperability based upon open international specifications and standards. You can find out more information about NES, its Patagonia Energy Applications Platform (EAP™) (including grid management software, distributed control nodes, and smart meters) and services at: www.networkedenergy.com.