



**FOR IMMEDIATE RELEASE**

## **Hitachi and Demansys Energy LLC Agree to Launch Demonstration of “CrystEna”<sup>\*1</sup> Energy Storage System**

*First pilot installation of CrystEna planned outside of Philadelphia*

Tarrytown, New York and New Milford, Connecticut, March 28, 2014 --- Hitachi America, Ltd., a wholly owned subsidiary of Hitachi, Ltd. (“Hitachi” / TSE:6501) and Demansys Energy LLC (“Demansys”) today announced that they have reached an agreement to perform a demonstration project utilizing Hitachi’s “CrystEna” compact container-type energy storage system in the market for frequency regulation and capacity services<sup>\*2</sup>, and that site installation work will soon commence. The demonstration, which is designed to confirm the benefits of using the CrystEna energy storage system for grid stabilization, will run for two years, beginning in June 2014.

Recently, regulators, grid operators, utilities, and research organizations have projected the need for additional grid storage systems to help ensure reliable power system operation as an increasing percentage of intermittent energy sources, such as wind and photovoltaic power generation, are brought on-line. Throughout the USA, numerous new entrants, including storage resources, are demonstrating their ability to provide frequency regulation and capacity services.

Hitachi’s CrystEna is a complete energy storage system. The system was developed with an emphasis on long operating life, providing significant commercial value. It uses Hitachi’s control systems and power conditioning systems (PCS), and lithium-ion batteries from Hitachi Chemical Co., Ltd.(TSE:4217). Its enhanced economics are due to both its compact design and system performance improvements.

Demansys is participating in frequency regulation and reserves programs throughout the Northeastern US, using its Grid Daemon platform to supply grid operators with highly-reliable services involving real-time control and management of energy storage and behind-the-meter energy assets. It also has the ability to provide capacity services and plans to do so from the New Jersey-based demonstration project.

Demansys will be responsible for overall coordination of the new demonstration project. The demonstration involves the installation of a Hitachi CrystEna system in New Jersey, not far from Philadelphia. To verify the system’s effectiveness for grid

stabilization, the demonstration will collect data over a two year period, including a capacity pilot project with PJM<sup>\*3</sup> and frequency regulation operation in PJM, the USA's largest independent grid operator. The demonstration will be used by Hitachi to further evaluate its energy storage systems and to verify the systems' reliability and effectiveness with a view to future commercialization.

Hitachi's electric power transmission and distribution systems business is a core part of its power systems business. It is seeking to expand its solution business by combining IT and power electronics technology for control systems and other balance of plant. Hitachi anticipates applications for CrystEna at a wide range of facilities in the future, and is actively working to expand sales of all of its energy storage systems.

Demansys' Grid Daemon has been used in a diverse range of commercial and industrial applications. Since October 2012, the company has participated in a pilot program in the New England frequency regulation market that controls consumer loads in order to regulate frequency without the use of generators. By maximizing benefits for end users, as well as providing an interface for market transactions between grid operators and consumers, Demansys is contributing to a robust frequency regulation market utilizing numerous types of supply resources.

In announcing the demonstration project, Masaaki Nomoto, General Manager, Transmission & Distribution Systems Division, Power Systems Company, Hitachi, Ltd. said, "We are pleased to conduct the demonstration project in the USA. This demonstration represents another important milestone in the deployment of Hitachi's battery storage business in the USA, and we will further pursue technically superior solutions to meet the requirements of various customers."

Jeff Lines, Demansys CEO said, "At its core, Demansys is committed to enhancing the smart grid and creating value for its stakeholders. We are proud to partner with Hitachi on the CrystEna project and incorporate our Grid Daemon software platform to demonstrate the significant impact this energy storage system will have on grid stabilization."

- \*1 Trademark registered in Japan. Application for trademark registration in USA currently pending.
- \*2 Capacity market: An auction through which grid operators secure a sufficient supply of capacity several years into the future from supply and demand-side resources. In PJM, rules are currently being developed for storage resources.
- \*3 PJM(PJM Interconnection LLC): Independent grid operator in the Mid-Atlantic and Midwest. Covering a total of 13 states, it is the largest power system operator in North America. PJM is an abbreviation of Pennsylvania, New Jersey, and Maryland.

### **About Hitachi, Ltd.**

Hitachi, Ltd. (TSE: 6501), headquartered in Tokyo, Japan, is a leading global electronics company with approximately 326,000 employees worldwide. The company's consolidated revenues for fiscal 2012 (ended March 31, 2013) totaled 9,041 billion yen (\$96.1 billion). Hitachi is focusing more than ever on the Social Innovation Business, which includes infrastructure systems, information & telecommunication systems, power systems, construction machinery, high functional material & components, automotive systems and others. For more information on Hitachi, please visit the company's website at <http://www.hitachi.com>.

### **About Hitachi America, Ltd.**

Hitachi America, Ltd. headquartered in Tarrytown, New York, a subsidiary of Hitachi, Ltd., and its subsidiary companies offer a broad range of electronics, power and industrial equipment and services, automotive products and consumer electronics with operations throughout the Americas. For more information, visit [www.hitachi-america.us](http://www.hitachi-america.us). For more information on other Hitachi Group companies in the United States, please visit [www.hitachi.us](http://www.hitachi.us).

### **About Demansys Energy LLC**

Demansys Energy LLC, a Connecticut-based company, is a provider of smart-grid services. Demansys provides turnkey solutions for advanced control of energy consumption, distributed generation, and storage resources, which creates additional revenue streams for end-use customers, as well as reliability products for utilities and grid operators. The Demansys Grid Daemon Platform was developed to continuously communicate with system operators and customers to seamlessly control demand-side energy resources and storage systems in real-time, using sophisticated proprietary algorithms. For more information, visit <http://www.demansys.com>.

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Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.

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