



## **Saft megawatt scale Li-ion energy storage systems will support the world's largest solar PV-diesel hybrid power plant in South America**

- *Spain's Isastur Group has specified Saft Intensium® Max Li-ion battery systems for a hybrid power plant in Bolivia that combines a 5 MW PV array with 16 MW diesel generation*
- *Storage of solar energy will improve access to electrical power in a remote area of Bolivia while helping save an estimated 20 million litres of diesel fuel a year.*
- *The Pando project is Saft's first major ESS contract in South America.*

**Paris, October 23, 2014** – Saft, world leader in the design, development and manufacture of high-tech batteries for industry, has been awarded a major contract to supply the megawatt scale lithium-ion (Li-ion) energy storage system (ESS) for the world's largest solar photovoltaic (PV) and diesel generation hybrid power project. The plant, which combines a 5 MW PV array with 16 MW diesel generation, is in Bolivia's Pando department, on the border with Brazil and Peru. It is currently under construction by Isotron SAU, a subsidiary of Spain's Isastur Group.

The Pando project, which is Saft's first major ESS contract in South America, confirms Saft's long term plans for expansion in this region, following the establishment in 2010 of a local sales and technical support office in Brazil. The South American market offers significant opportunities for energy storage due to the growing importance of renewable energy, especially solar PV.

Pando is in the remote tropical northern area of Bolivia in the Amazonian rain forest. It is not connected to the country's national grid, resulting in electricity coverage of just 65 percent, with the 37 GWh demand met exclusively by diesel generation.

Bolivia has a high degree of solar irradiation, creating significant potential for the large scale use of solar energy. The hybrid power plant will coordinate PV and diesel generation to maximise the use of clean solar power to meet around half the energy demand in the department's capital city of Cobija and neighbouring towns - which represent a total peak load of around 9 MW. With a total output of 21 MW, the new hybrid plant will increase the overall production of electricity in the Pando department, bringing it in line with the rest of Bolivia, which has electricity coverage of 80 percent.

Effective energy storage will play a critical role in the hybrid plant by ensuring system stability and smoothing out short term variations in output from the PV array, both of which are essential to achieve the highest possible contribution of PV to the energy mix. The integration of PV with energy storage and diesel generation will ensure total continuity of supply for Pando, while reducing fuel consumption by an estimated 20 million litres a year, saving the utility millions of dollars and reducing CO<sub>2</sub> emissions.



*'Saft is delighted to be working with Isastur on this prestigious project that provides an important breakthrough for our Li-ion battery technology in the South American sector, where PV is becoming an essential element within the overall energy mix,' said Ignacio Quiles, Saft Sales Manager & Managing Director Saft Baterias, Spain and South America. 'The Pando hybrid scheme provides an excellent reference of how large scale PV and conventional generation can be integrated with energy storage to deliver continuous and reliable electricity supplies for remote communities where grid connections are unreliable or non-existent.'*

The ESS will comprise two of Saft's well proven Intensium® Max 20 M Medium Power containerised Li-ion battery systems, each with a nominal storage capacity of 580 kWh and 1.1 MW peak power output. The batteries will operate in combination with inverters and intelligent control systems that enable large amounts of solar power to be integrated into diesel powered grids, ensuring system stability and smooth control of the gensets. In the Pando project, the contribution of solar PV to the energy mix is around double that of traditional PV-diesel hybrid systems.

The project is being coordinated by Saft's Spanish subsidiary, which is responsible for the Central and South American market, together with Saft do Brazil. Saft is offering a multi-year warranty for the Intensium® Max systems together with preventive maintenance, with the possibility to extend the warranty up to 12 years through a maintenance contract. The Pando plant started generating 2 MW of electricity in September, with the rest of its capacity online before the end of 2014.

### **About Saft**

Saft (Euronext: Saft) is a world leading designer and manufacturer of advanced technology batteries for industry. The Group is the world's leading manufacturer of nickel batteries and primary lithium batteries for the industrial infrastructure and processes, transportation, civil and military electronics' markets. Saft is the world leader in space and defence batteries with its Li-ion technologies which are also deployed in the energy storage, transportation and telecommunication network markets. More than 3,800 employees in 18 countries, 14 manufacturing sites and an extensive sales network all contribute to accelerating the Group's growth for the future.

Saft batteries. Designed for industry.

[www.saftbatteries.com](http://www.saftbatteries.com)

### **Press contact:**

#### **Saft**

Jill Ledger, Corporate Communication and Institutional Director

Tel.: +33 1 49 93 17 77, e-mail: [jill.ledger@saftbatteries.com](mailto:jill.ledger@saftbatteries.com)

Marie-Christine Guihéneuf, IBG Communication Manager

Tel.: +33 1 49 93 17 16, e-mail: [marie-christine.guiheneuf@saftbatteries.com](mailto:marie-christine.guiheneuf@saftbatteries.com)

#### **Six Degrees**

Andrew Bartlett, Tel.: +44 118 900 0860, e-mail: [andrew.bartlett@sixdegreespr.com](mailto:andrew.bartlett@sixdegreespr.com)