# Press Release

30 January 2013

### Further to the successful deployment of a 1 MW tidal turbine

## Alstom completes the acquisition of Tidal Generation Limited (TGL) from Rolls-Royce plc

Alstom has completed the acquisition of Tidal Generation Limited (TGL) from Rolls-Royce plc. In September 2012, Alstom announced that it had agreed to acquire TGL, which specialises in the design and manufacturing of tidal stream turbines, subject to the achievement of critical milestones including the successful installation of the 1 MW tidal turbine at the European Marine Energy Centre's (EMEC) full-scale tidal test site in Orkney, Scotland.

On 24<sup>th</sup> January 2013, TGL, now rebranded Alstom successfully installed the 1MW tidal turbine on the same tripod support structure used to deploy the previously tested 500kW device.

As part of the Energy Technologies Institute (ETI) commissioned and co-funded ReDAPT (Reliable Data Acquisition Platform for Tidal) consortium project, the 1MW tidal turbine will be tested in different operational conditions off Orkney over an 18 month period. Detailed environmental information and real life sea performance data will be generated in order to further improve tidal power technology and to reach a commercial scale. The next step is to install pilot arrays prior to full commercial production.

"The UK is a world-leader in the development of renewable energy technologies. Together, Alstom, the ETI and the ReDAPT partners are accelerating the development of tidal technology helping to position it, as a new more affordable, secure and sustainable source of energy." said Dr David Clarke, Chief Executive Officer, Energy Technologies Institute.

"This new milestone installation in the development of tidal power generation technology is a step further towards the commercialisation of this new power solution. The aim of this project is also to demonstrate a new, efficient and reliable turbine design" said Jacques Jamart, Senior Vice President Alstom New Energies.

With a rotor diameter of 18m, a twenty-two metres long nacelle and a weight of 150 tonnes, the tidal turbine has three pitchable blades. Buoyancy enables the turbine nacelle to be easily towed to and from the point of operation. This minimises installation and maintenance costs by avoiding the need for specialist vessels and divers and reduces the



timeframe to install or retrieve the turbine. The unit operates, fully submerged at a water depth of 40 meters, by rotating to face the incoming tide at an optimal angle, to extract the maximum energy potential.

"This technology will optimise electricity production, limit maintenance constraints, and thus will help reduce the cost of electricity of this renewable energy source" said Jérôme Pécresse, President of Alstom Renewable Power. With the integration of new resources, skills and know-how, we will be ready to respond to the first tenders for the development of tidal arrays in France and in the UK, with the best range of products available in the market"

With this acquisition, Alstom continues to develop the broadest portfolio in the renewable power industry. The company offers the most complete range of products and integrated systems, for hydro, onshore and offshore wind, geothermal, biomass and solar power.

#### **About Alstom**

Alstom is a global leader in the world of power generation, power transmission and rail infrastructure and sets the benchmark for innovative and environmentally friendly technologies. Alstom builds the fastest train and the highest capacity automated metro in the world, provides turnkey integrated power plant solutions and associated services for a wide variety of energy sources, including hydro, nuclear, gas, coal and wind, and it offers a wide range of solutions for power transmission, with a focus on smart grids. The Group employs 92,000 people in around 100 countries. It had sales of  $\notin$ 20 billion and booked close to  $\notin$ 22 billion in orders in 2011/12.

#### **NOTES FOR EDITORS:**

- The Energy Technologies Institute (ETI) is a public-private partnership between global industry leaders – BP, Caterpillar, EDF, E.ON, Rolls-Royce and Shell – and the UK Government tasked with accelerating affordable, clean, secure technologies needed to help the UK meet its 2050 climate change targets. It makes targeted investments in projects in offshore wind, marine, distributed energy, buildings, energy storage and distribution, carbon capture and storage, transport and bio energy.
- 2. The ETI commissioned and co-funded ReDAPT (Reliable Data Acquisition Platform for Tidal) consortium project is led by TGL, and includes Garrad Hassan, the University of Edinburgh, EDF Energy, E.ON, Plymouth Marine Laboratory and the European Marine Energy Centre (EMEC).

#### **Press Contacts**

Emmanuelle Châtelain, Isabelle Tourancheau - Tel +33 1 41 37 38 /39 95 <u>emmanuelle.chatelain@chq.alstom.com</u>, <u>isabelle.tourancheau@chq.alstom.com</u> Stephanie Roux – Jerome Bridon (Alstom Renewable Power) – Tel.:+ 33 1 41 49 78 62 / 38 78 <u>stephanie.roux@power.alstom.com</u>; jerome.bridon@power.alstom.com

#### **Investor Relations**

Delphine Brault – Tel +33 1 41 49 26 42 <u>delphine.brault@chq.alstom.com</u> **Website** <u>www.alstom.com</u>/power/renewables



