



Mutual Press Release

EDF and STORNETIC start project on advanced smart grids storage solutions

Flywheel Energy Storage device DuraStor® to be installed near Paris

Paris / Jülich, 17 November 2016. EDF and STORNETIC have launched a joint project on advanced smart grid storage solutions. The project serves to assess the performance of flywheel energy storage technology facing the requirements of a modern grid environment. As part of the collaboration, STORNETIC is going to deliver a DuraStor® Energy Storage device to EDF by June 2017, which will be installed at the EDF Concept Grid site in Moret-sur-Loing near Paris.

The development of variable renewables has raised a lot of new requirements to generation facilities and grid operators. “We believe that energy storage solutions will play a key role in the upcoming transformations of the electrical systems. Thanks to the unique EDF experimental facility of Concept Grid, we are able to reproduce real distribution networks and test innovative electrical equipment in fully controllable conditions of operation. Thus, as one of the promising storage solutions, we are very excited to assess the performances of the STORNETIC technology regarding various applications such as renewables smoothing or frequency regulation” says Etienne Brière, Renewables and Storage Program Director at EDF’s R&D.

Full capacity over the complete lifetime

The DuraStor® by STORNETIC enables grid operators to transform electrical energy into rotation energy and store it. It is a durable solution, designed for more than 1.000.000 charging cycles and retains its full capacity over its complete lifetime. It combines the advantages of mechanical energy storage, such as sturdiness and endurance, with the advantages of modularity and rapid installation. The device operates purely mechanically – without the use of chemicals – and is made of materials that are fully recyclable.

“We are thrilled to see EDF having decided for our solution”, says STORNETIC’s Director Olivier Marques-Borras. “We believe that our flywheel technology can make a real difference. It is ideal for customers with many charging and discharging cycles. This makes it highly interesting for operators of micro grids all around the globe. At the EDF Concept Grid site we are going to assess the advantages of our technology. We believe that flywheels will be part of the future of short term energy storage.”

Full testing playground at EDF Concept Grid, South of Paris

The Concept Grid laboratory is a unique smart grid test facility located in the South of Paris. The laboratory is dedicated to the validation of innovative solutions for the electrical system. It aims at reducing the time to market of new smart grid technologies, by helping manufacturers, start-ups and academics to understand and meet the challenges of real field environment. Concept Grid is also a key laboratory for utilities to prepare and de-risk experimentations through accelerated test campaigns that would be impossible to conduct on the field. Concept Grid is composed of 10 km of real electrical medium and low voltage networks, it has several substations and test areas, a neighbourhood of five small houses fitted with local generation, and it can also perform bespoke scenarios with power hardware in the loop simulation. Concept Grid is open to external customers and collaborations.

EDF. A key player in energy transition, the EDF Group is an integrated electricity company, active in all areas of the business: generation, transmission, distribution, energy supply and trading, energy services. A global leader in low-carbon energies, the Group has developed a diversified generation mix based on nuclear power, hydropower, new renewable energies and thermal energy. The Group is involved in supplying energy and services to approximately 37.6 million customers, of which 27.8 million in France. The Group generated consolidated sales of €75 billion in 2015, of which 47.2% outside of France. EDF is listed on the Paris Stock Exchange.

STORNETIC develops, produces and markets energy storage systems. By using energy storage on a flywheel basis, customers can convert electric power into rotation energy which they can then store.

Press contacts

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