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Abstract Format

Title: HQ perspective regarding the renewable/storage market

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Abstract:

The market of renewable energy has changed at a rapid pace over the last decades and it is now part of the portfolio of electric utilities throughout the world. As an example, Hydro-Québec will have integrated 4000 MW of wind energy by the end of 2015. Furthermore, HQ is also looking very carefully at the upcoming solar energy market considering the rapid cost decrease which may render solar energy attractive even in the context of low electricity rates.

Renewables energies are variable by nature. As such, storage is a major enabler. Hydroelectricity is a perfect complement to renewable energy in particular with large and multiannual reservoirs. Other technologies are also important such as batteries for specific applications like remote areas where local balancing power shall be provided.

The presentation will look at the situation of Hydro-Québec as a proxy for the change and transition occurring in the North American market. A discussion will be made regarding the integration of wind, the perspectives of solar and other emerging renewable energies and the importance of enablers such as smart grid, storage and power system simulation for integrating renewable energies efficiently into a large electric grid.