

## ABB wins \$130-million HVDC order for subsea power transmission link in Finland

### HVDC Light technology secures power supply and grid reliability to Finnish archipelago

Zurich, Switzerland, Dec. 13, 2012 – ABB, the leading power and automation technology group, has won an order worth around \$130 million from Krafnät Åland AB to supply a new power transmission link between the Finnish mainland and Åland.

The high-voltage direct current (HVDC) transmission system will be capable of transmitting 100 MW (megawatts) of electricity with minimum losses across a distance of 158 kilometers.

The Åland archipelago, an autonomous Finnish province at the entrance to the Gulf of Bothnia in the Baltic Sea, presently receives its power through an AC (alternating current) cable from Sweden and local renewable sources. The existing fossil fueled power generation backup facility will be closed down once the new link is in operation. Apart from resolving the supply issue and reducing dependence on fossil fuels, the HVDC Light® link will enhance the contribution of renewables to the grid and help Finland reach its emission reduction targets.

“The link will enable the integration of more renewable energy, provide security of power supply and grid reliability to Åland,” said Brice Koch, head of ABB's Power Systems division. “Our in-house manufacturing capability for converters, cables and semiconductors – the key components for HVDC – combined with our global track record will help us to deliver a best-in-class solution.”

ABB will design, engineer, supply and commission two 100 MW, ±80 kV (kilovolt) HVDC Light converter stations, one situated in Ytterby, Åland and the other in Nådendal, Finland. Two 80 kilovolt (kV) submarine cables, each 158 km long, will enable the transmission of power. The link is scheduled to become operational in 2015.

The HVDC system incorporates special features such as active AC voltage support providing greater network stability and the unique ‘black-start’ capability, which provides faster grid restoration in the event of a blackout. The system is DC grid enabled, ie, prepared for a multi-terminal configuration, which allows for additional in-feed from stations, such as future wind power plants.

HVDC Light technology enables underground and subsea transmission, and offers several environmental benefits, such as neutral electromagnetic fields, oil-free cables and compact converter stations. It is an ideal solution for connecting remote power sources like renewables to mainland networks, overcoming distance limitations and grid constraints, while ensuring robust performance and minimal electrical losses.

ABB pioneered HVDC transmission technology almost 60 years ago and has extensive experience in both new installations and refurbishments. ABB remains the world leader in this highly-efficient technology, with over 70 HVDC projects around the world, providing a total transmission capacity of more than 60,000 MW.

For information and visual material please click [here](#).

ABB ([www.abb.com](http://www.abb.com)) is a leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 145,000 people.

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