



## HVDC Light Transmission Systems

**"HVDC Light is the most interesting power transmission system developed for several decades. It has the potential of changing the way transmissions are built in the future,"**

HVDC Light™ is a fundamentally new power transmission technology developed by ABB. It is particularly suitable for small-scale power generation/transmission applications and extends the economical power range of HVDC transmission down to just a few tens of megawatts (MW).



The HVDC Light™ system comprises two (or more) converter stations at the ends of a transmission line. Although conventional DC overhead lines could be used for the link, maximum benefits would be derived from the system when underground cable is used as the link between the two converter stations. In many cases the evaluated cable cost is lower than for an overhead line, and the environmental and other permits for a HVDC Light™ cable are much easier to obtain!

Besides being a cost competitive alternative to conventional AC and local generation, HVDC Light™ also opens up new possibilities for improving the quality of supply in AC power networks. With an HVDC system, the power flow can be controlled rapidly and accurately as to both the power level and the direction. HVDC also provides isolation from disturbances that occur within the connected AC networks.

HVDC Light™ was introduced in 1997. A number of transmissions up to 330 MW are in commercial operation and more are being built.