

East-West Interconnector Interconnecting grids



ABB Id No: POW0069

It is the first HVDC Light project to use +/-200 kV cables, and is one of the largest orders in ABB's HVDC history.

The Irish transmission system operator (TSO), EirGrid, awarded a contract to ABB to supply power equipment to connect the power grids of Ireland and Wales.

Ireland is expanding its wind power generation and the 500 MW ±200 kV EWIC HVDC Light transmission system provides an opportunity to export excess power into the UK market. Because EWIC transmits electricity in both directions, it benefits consumers by improving security of supply, increasing competitiveness and encouraging the growth of renewable energy generation.

Additional customer benefits, due to the choice of the HVDC Light technology, are the system's "black start" capability of restoring power in the event of blackouts and active AC voltage support. In addition, by connecting to the UK national grid, Ireland can now access power from right across Europe (via an interconnector from Britain to the continent).

The East West Interconnector runs between Deeside in north Wales and Woodland, County Meath in Ireland. Approximately 260-km in length, the underground (75-km) and undersea (186-km) link has the capacity to transport enough energy to power 300,000 homes.

ABB was responsible for system engineering, including design, supply and installation of the converter stations and the sea and land cables.



Main data:

Commissioning year:	2013
Power rating:	500 MW
No of circuits:	1
AC voltage:	400 kV
DC voltage:	±200 kV
Length of DC underground cable:	2 x 75 km
Length of DC submarine cable:	2 x 186 km
Main reason for choosing HVDC Light:	Length of land and sea cables, controllability, black start and active reactive power support
Application:	Interconnecting grids