

What is the Tyrone to Cavan Interconnector?

The Tyrone to Cavan Interconnector is a major infrastructure project being jointly undertaken by Northern Ireland Electricity and EirGrid. The Utility Regulator (NIAUR) have asked NIE to deliver a new electricity interconnector between Northern Ireland and Republic of Ireland to meet strategic needs.

Why do we need a new Interconnector?

- From the 1 November 2007, following creation of the Single Electricity Market (SEM) in Ireland, all customers have the right to choose one of the electricity supply companies currently licensed to supply electricity in Northern Ireland. The SEM will encourage competition thereby offering consumers choice and competitive prices. For this market to work more effectively the interconnector is essential.
- The Department of Enterprise Trade and Investment (DETI) have set in place incentives to encourage large amounts of electricity to be generated from renewable sources. The interconnector is vital in transporting energy, generated from renewable energy, around the electricity network.
- As society grows and develops so does the demand for a secure and reliable electricity supply. The interconnector will increase future security of supply to electricity consumers throughout the island of Ireland.

The proposed route.

Both NIE and EirGrid have held various public consultation days in order to develop the route. These consultation days involved householders, political representatives, business and landowners along a 2 kilometre corridor.

The interconnector route is planned to run from North of the village of Moy in South East Tyrone to the townland of Clontibret at the Armagh Monaghan border.

The interconnector will consist of a new 80km 400kV line. Approximately 35km of the new line will be in Northern Ireland with approximately 45km in Republic of Ireland.

When designing the specific route for the interconnector, factors such as residential properties and schools, archaeological sites, land type, physical and built features and planning applications, where all taken into consideration.

To minimise visual impact, the tower structure that has been developed, will be shorter than existing towers. Conventional towers are on average 33% to 50% taller.

Why not place the line underground?

It is not common practise to underground high voltage transmission circuits in Europe, or indeed in the rest of the world. Undergrounding is still very much a technical experiment. The Danish government recently announced an intended policy of placing future electricity transmission circuits underground. This policy was based on a report 'Technical Report on the Future Expansion and Undergrounding of the Electricity Transmission Grid', which states that 'Very long AC cables have never been tested anywhere in the world and a

possible test involving one long cable section in the Danish electricity grid (60-100km) will be the world's largest cable test.' This test will not be able to go ahead for 6 – 10 years.

NIE works closely with the regulator to ensure the best possible service at the best possible price for the Northern Ireland customers. It is generally accepted that undergrounding transmission circuits is significantly more expensive than building overhead lines resulting in increased electricity prices for customers, thus contravening the principals of a tightly regulated company.

NIE and EirGrid have commissioned a number of consultants to investigate and report on various aspects of undergrounding of transmission lines in the network in Ireland. These consultants are PB Power, TEPCO and TransGrid.

A full assessment of the undergrounding options, including the series of reports outlined above, will be included in the Environmental Impact Statement that will be submitted along with the planning application.

Information on Electric and Magnetic Fields (EMF'S)

NIE is very aware of people's health concerns with respect to power lines and we want to reassure the public that any power lines that are built will fully comply with government guidelines regarding exposure to electric and magnetic fields.

These guidelines are based on guidance published by worldwide expert groups such as World Health Organisation who regularly monitor any research carried out in this area across the world.

NIE's standard route planning criteria, which comply with authoritative international and national guidelines including EMF exposure, generally seek to avoid populated areas on visual and amenity grounds and the proposed line is routed as far from existing homes as is reasonably possible.