

Health and the East West Interconnector

15 January 2014 - There has recently been some inaccurate commentary which suggested the EirGrid East West Interconnector, which connects the Irish and British grids, was put underground as a result of health concerns.

The East West Interconnector was planned and built as an underground and sub-sea cable using technology called high-voltage direct current (HVDC). This is the only technical solution for crossing the Irish Sea (at a distance of 185 kilometres) and connecting two separate transmission systems.

In common with overhead lines, underground cables are a source of magnetic fields and, as such, the East West Interconnector has been subjected to rigorous scrutiny with regard to possible health risks.

Two independent reports were commissioned to address safety concerns - one commissioned by the Department of Communications, Energy and Natural Resources (DCENR) and carried out by radiobiologist Eric van Rongen; and one by international energy consultants, KEMA, jointly commissioned by Rush Community Council and EirGrid.

Both concluded that the interconnector and associated underground cables were safe.

Dr James Reilly TD raised the issue of potential adverse health effects from the underground cables in 2012, based on a letter from Dr Anthony Staines of Dublin City University and the matter was referred to the Chief Medical Officer (CMO) to consider.

The CMO's report concluded that there was no evidence that the interconnector posed a risk to health. It also proposed a programme of monitoring of the EMF emanating from the cables.

This monitoring was implemented through the DCENR and it confirmed that the actual EMF levels from the cables were well below the levels recommended in international guidelines, as had been indicated by EirGrid.

Ends

Notes to the editor:

- 1. The European Union and the Irish Government recommend compliance with the International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines to ensure public safety in relation to EMF generated by electricity. EirGrid designs and operates the grid in compliance with these guidelines.
- 2. Ireland has an Alternating Current (AC) electricity grid, the vast majority of which is overhead, in line with current practice worldwide. There have been calls to underground the three proposed high-voltage, 400kV developments namely the North South 400kV Interconnection Development, the Grid Link Project and the Grid West Project.

The only way to do so would be using HVDC technology. However, there are cost and technical issues associated with introducing this technology into a transmission network that is comprised of over 6,000 kilometres of highly inter-dependent AC lines.

3. The Office of the Chief Scientific Adviser to the Government carried out a review on EMF & Power Lines in 2010 and found that "It is simply not possible for the level of energies associated with power lines to cause cancer".