

SEAT UPDATE

Bulletin 4 June 2008



Underground makes sense

Safe Electricity for Armagh and Tyrone: SEAT

KEY FACTS

SEAT and its counterpart, North East Pylon Pressure (NEPP) in the Republic were formed in the autumn of 2007 in response to the massive public outcry in Armagh, Tyrone, Meath, Cavan and Monaghan following NIE and EirGrid's proposal to string 100 km of extra high voltage overhead power lines and pylons across the region and to build large substations in scenic areas of Counties Cavan and Tyrone.

Both are progressive campaign groups and are in favour of upgrading our electricity transmission system. The groups recommend, however, that modern underground cabling technology be used rather than unsightly and outmoded overhead power lines and pylon towers.

Both enjoy the support of a range of reputable organizations including: Fáilte Ireland, Irish Hotels Federation, GAA, ICMSA, IFA, IAVI and the County Councils in Meath, Cavan and Monaghan and Armagh City and District Council. Both groups also enjoy consistent public support as evidenced by generous funding donations and the strong attendances at public meetings and at 'people power' events.

- ⚡ EirGrid and NIE have chosen corridor options for the North-South interconnector project through some of the most scenic areas of our countryside
- ⚡ EirGrid and NIE have not examined or analysed, even as part of a feasibility study, the modern alternative of an underground route corridor for this project.
- ⚡ EirGrid and NIE claim that an underground cable is not technically feasible ; will cost between 3 times to 25 times the cost of an overhead pylon line equivalent, despite having never conducted any project specific studies to support these claims.



Overhead versus Underground

Undergrounding provides a sensible solution to the significant problems posed by overhead pylons:

PYLON PROBLEMS	SOLVED BY UNDERGROUNDING
✘ Land & Property Devaluation	✔ Eliminated
✘ Visual & Tourism Impact	✔ Eliminated
✘ Environmental Impact	✔ Eliminated
✘ Radiation & Health Effects	✔ Eliminated
✘ Intrusion on Farming	✔ Minimised
✘ Delayed Construction	✔ Faster Construction
✘ Outdated Technology	✔ Modern Technology
✘ Public Rejection	✔ Public acceptance & support

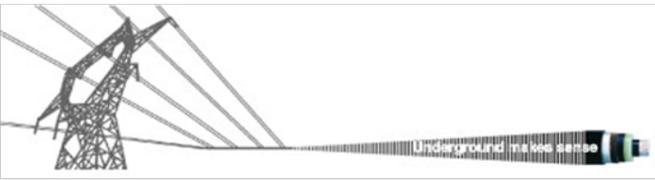
Solve the problem – Bury the cables

There will be reduced greenhouse gas emissions through reduced power transmission losses

- Transmission losses represent a loss in value and an increase in fuel burn and environmental impact.
- In Europe, transmission line losses alone represent the waste of around 20 million tonnes of coal, 3.1 million tonnes of gas and 1.7 million tonnes of oil. The annual loss in value is around €12 billion.
- The annual increase in greenhouse gas emissions is around 60 million tonnes of CO₂ per year. In some countries, older transformer infrastructure and lines can yield losses as high as 21%. Ireland's grid losses are above the European average.

There will be a reduced carbon footprint by using less land and materials:

- Underground cables and overhead lines have significantly different footprints through the countryside when completed. While an overhead line requires a strip around 60 metres wide to be kept permanently clear for safety, maintenance, and repair, an underground cable of the same capacity requires only 10 metres or so.



KEY MESSAGES

The people on the route of this proposal will not accept, under any circumstances, the 400Kv overhead lines and associated pylon towers. Progressing the overhead approach will result in a lose-lose situation:

- Major delays, conflicts and increased costs
- A serious disconnect between elected representatives and their constituents.

Elected representatives should focus on a solution-based rather than a stand-off based approach.

A viable and acceptable alternative exists in the form of undergrounding, using either:

- High Voltage Direct Current (HVDC) technology, or
- Alternating Current (AC) cabling.

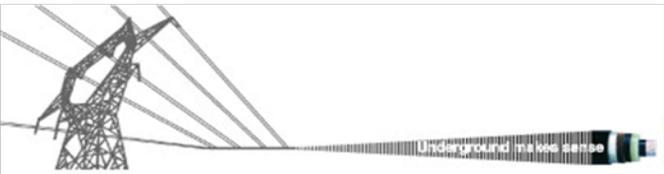
Recent statements made in Joint Oireachtas Committee hearings by both Oceanteam/ Imera and by EirGrid confirm that these alternatives are financially feasible.

Progressing the underground option requires political leadership, similar to the leadership shown in other environmentally conscious countries such as Norway and Sweden.

NIE and EIRGRID should not be the sole source of information to the Assembly and Oireachtas in relation to the subject of electricity transmission. Their expertise is predominantly in the field of overhead lines. Recent advances in undergrounding need to be given appropriate attention and weight.

The two East/West Interconnector projects provide significant learnings for decisions in relation to the North-South Interconnector project:

- Oceanteam/Imera project will be implemented at zero cost to the public. Oceanteam/Imera believe that the N-S interconnector could be established using HVDC technology at the same cost as overhead lines and with beneficial environmental aspects
- NIE/EirGrid project will require tariffs and charges to the public.
- NIE/EirGrid project will utilize undergrounding from Dublin to Meath.



KEY ACTIONS

SEAT calls on our elected representatives to do the following:

Request NIE & EirGrid to conduct a detailed site specific study analysis of an underground cable route for the North-South interconnector project, including the following:

- Identify a specific underground route
- Perform a full technical and cost analysis
- Estimate the financial compensation costs of an overhead compared to an underground line option.

Request NIE & EirGrid to conduct a proper consultation process, in a non-aggressive manner, with the people of Armagh, Tyrone, Monaghan and Cavan.

Publish the proposed route corridor options for the remaining 600km of overhead extra high voltage transmission lines outlined for the country in the 'All Island Grid Study.'

Request the Assembly, through the Dept of Environment, to implement the following key actions outlined below:

- Make available sufficient funds for scientific research on the health effects of Electromagnetic fields. The Irish Government has agreed to establish a national research programme. But no action has occurred to date.
- Establish an EMF Safety Users group, on a cross border basis, involving routine meetings with stakeholders.' Where major new power lines are to be constructed, there should be stakeholder input on the routing' (Health Effects of Electromagnetic Fields Report, 2007, p.3)
- Ensure that a public enquiry is held when the planning application from NIE and EirGrid is received.

