EirGrid Submits Planning Application for Meath-Tyrone 400kV

Interconnection Development

December 18, 2009: EirGrid is today submitting a planning application to An Bord Pleanála under the Strategic Infrastructure Act for the Meath – Tyrone 400kV Interconnection Development, which will facilitate cross-border sharing of electricity and ensure the long-term secure supply of electricity for the North East.

The route being submitted for planning approval runs from Woodland, Co. Meath to Lemgare, Co. Monaghan and includes a proposed new sub-station at Moyhill, Co Meath.

This route was defined in earlier route selection studies as Route 3B from Meath to Cavan and Route A from Cavan to Tyrone.

The Environmental Impact Statement (EIS) submitted to the Board will be available for statutory public consultation for 10 weeks, from January 4 to March 12 and submissions can be emailed to bord@pleanala.ie or posted to An Bord Pleanála, 64 Marlborough Street, Dublin 1. From next week the application and EIS will be available on a new dedicated website, www.eirgridnortheastprojects.com.

"We have proposed an extension of the statutory public consultation by three weeks because of Christmas and while the EIS is available to download and to view throughout Christmas, the public consultation will formally begin on January 4th," says Tomás Mahony, Project Engineer, EirGrid. "We encourage people to come into the EirGrid Information Centres in Navan and Carrickmacross to view the documents and to meet members of our team who can clarify any questions they may have – we will be on the ground in the Navan and Carrickmacross Information Centres in January and February, or by appointment."

In the course of examining options for this project and for the development of the transmission system generally, EirGrid has carried out extensive technical and economic analysis and has reviewed international practice and experience.

One of the issues frequently raised is the possibility of developing an underground cable solution. Having carried out detailed analysis and having reviewed a wide range of international material, EirGrid has concluded that with the current state of technology it is simply not practical to develop an underground solution for this project today.

"Internationally there is a reasonable level of experience of underground development at lower voltages," says Tomás Mahony.

He adds: "However at 400kV, the voltage required for this project, many of the technical challenges have not been overcome and there are no underground cable developments anywhere in the world at this scale and voltage. EirGrid concludes that attempting to develop this project on an underground basis would at best be a high-risk experiment, which may well result in failure, could waste many hundreds of millions of customer's money and would jeopardise security of supply to the north-east region and indeed to the electricity system throughout Ireland."

The analysis carried out by EirGrid includes a study by PB Power, which looked at the engineering, environmental and cost issues associated with undergrounding a project of this nature. The report concludes that overhead power lines are the cheapest and most secure option for the planned power lines in the North East. These findings are very much in line with a wide range of reports carried out internationally by transmission system operators and government authorities, including the Ecofys report commissioned by the Department of Communications Energy and Natural Resources.

EirGrid also commissioned Tokyo Electric Power Company (TEPCO), which has installed and operates the longest 500kV underground cable in the world at 40 km, to examine the potential for installing high voltage underground cable in the Irish system, ignoring cost and environmental issues.

The TEPCO Report confirms that there are a number of serious technical challenges involved in installing an underground cable of this type and length. EirGrid concludes, based on a review of the TEPCO report and other inputs, that there are huge risks which would accompany a project on this scale.

TEPCO is one of a suite of reports being published today in conjunction with the submission of the planning application to An Bord Pleanála. The reports are mainly technical in nature and are available on www.eirgrid.com.

"EirGrid does not intend to propose an underground solution which is clearly technically inferior, would cost at least hundreds of millions of Euros more than an overhead line solution and which ultimately may well fail, thus putting security of electricity supply at significant risk," says Tomás Mahony.

About the EIS

The EIS contains several volumes, with the key technical aspects included in the following:

- Volume 1: overview of the complete project, including the need for the project and the various legislations that establish its necessity.
- Volume 2: focuses on the technical aspects of the project

- Volume 2, Part A focuses on the Woodland, Co. Meath to proposed new substation at Moyhill, Co. Meath section
- Volume 2, Part B relates to the Moyhill, Co. Meath to the Lemgare, Co. Monaghan (Border) section, including the new, proposed substation

The EIS is on view at:

- EirGrid Information Centre in Carrickmacross, Co. Monaghan
- EirGrid Information Centre in Navan, Co. Meath
- An Bord Pleanála's Head Office at 64 Marlborough Street, Dublin 1
- Meath, Cavan, and Monaghan County Council Offices
- Download free of charge at <u>www.eirgridnortheastprojects.com</u>.
- Executive Summary and CD of the entire EIS are available free of charge for visitors to the EirGrid Information Centres in Navan and Carrickmacross

In addition, the CD of the EIS can be purchased for €5.00 and a hard copy of the entire EIS is also available.

"Individuals, communities, public representatives and business people have all made submissions on issues such as undergrounding, health, proximity to dwellings, tourism, environmental issues, and property values. These, and many more issues, have been taken into consideration by EirGrid when developing and finalising the planning application," says Tomas Mahony, Project Engineer, EirGrid.

ENDS.

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Notes to the Editor

1. Description of the route being submitted for planning

EirGrid's planning application consists of the following:

- 400kV OHL power lines from the border crossing area at Mullyard, Co. Armagh and the townland of Lemgare, Co. Monaghan (Route 3B from Meath to Cavan and Route A from Cavan to Tyrone in the route selection studies.)
- A 400kV substation at Moyhill, Co. Meath;
- The diversion of existing 220kV OHL power lines into Moyhill, Co. Meath; and

- 400kV OHL power lines from Moyhill, Co. Meath to existing substation at Woodland, Co. Meath

2. Summary of the various environmental impacts considered

The technical consultants on the project explored and studied a wide range of environmental impacts as part of the EIS. The key impacts include:

human beings
climate and air

flora and fauna
 electric and magnetic fields
 geology and soils
 noise
 traffic
 landscape

- water - cultural heritage.

EirGrid is planning a project to facilitate cross-border sharing of electricity, promote better competition, and to ensure a future secure supply of electricity throughout the North East. The proposed project will bring a variety of benefits to the North East, including:

- Facilitating cross-border sharing of electricity.
- Providing high quality bulk power supply for the region.
- Supporting growth in the region and ensuring continued reliability of supply.
- Boosting existing industry in the North East when competing for business and inward development.
- Guaranteeing security of supply for future decades.
- Increasing competition and, therefore, reducing the cost of electricity to customers.
- Increasing reliability for the local network in the North East and for all electricity customers.
- Allowing more renewable energy to be connected to the electricity network, thereby reducing Ireland's dependency on fossil fuels.

3. Strategic Infrastructure Board

An Bord Pleanála, is the independent national board responsible for planning applications and appeals in The Republic of Ireland. The application to An Bord Pleanála is specifically governed by the Planning and Development (Strategic Infrastructure) Act 2006. There is now a statutory consultation period with An Bord Pleanála. All official submissions relating to the planning application for the project should be made to An Bord Pleanála during this statutory consultation period.

List of Reports published today on www.eirgrid.com

- NIE and ESBNG "Technical Report Part 1 Studies April 2001 July 2004"
- CER and NIAER Joint Report on the Case for a Second North-South Interconnector
- Tokyo Electric Power Company of Japan (TEPCO) Technical Study on using EHV UGC as alternatives to OHL (Oct 2009)
- Investigating the Impact of HVDC Schemes in the Irish Transmission Network (TransGrid Solutions Inc Oct 2009)
- Meath-Tyrone 400 kV Interconnection Development: Tower Outline Evaluation and Selection Report (Oct 2009)
- Louth Tandragee 275kV Feasibility Study (South of the Border) (ESBNG 2005)
- Tandragee Louth 275kV Feasibility Study (NIE 2005)
- Arva Drumkee 275 kV Feasibility Study (Joint NIE and ESBNG 2004)
- Drumkee Kingscourt 275kV Feasibility Study (South of the Border) (ESBNG 2005)
- Additional Interconnection between Northern Ireland and Republic of Ireland –
 Selection of Preferred Option (EirGrid and NIE Oct 2005)
- North East 220 kV Reinforcement Project Initial Feasibility Study Final 2002
- Additional Interconnection between Northern Ireland and Republic of Ireland –
 Technical Report Part II July 2004 to March 2005 (2005)
- Kingscourt 400 kV Sites Selection (April 2006)
- Additional Electricity Interconnection between Northern Ireland and Republic of Ireland (a joint proposal from NIE and Eirgrid to both Regulatory Authorities – and includes the written response from CER / NIAUR)
- Turleenan Kingscourt 400kV Project. Visual Assessment of Tower Outline"
- Kingscourt Woodland 400kV Feasibility Study