

MEATH – TYRONE 400 kV INTERCONNECTION DEVELOPMENT

PLANNING REPORT

Prepared For

EirGrid plc

by

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1.0 INTRODUCTION

This Report has been prepared to accompany an application by EirGrid plc to An Bord Pleanála for Approval to construct and operate that portion of the overall proposed Meath-Tyrone 400 kV Interconnection Development occurring within the Republic of Ireland. The application is made as agent for ESB Networks (a business unit of ESB – “ESB”) who is the transmission asset owner pursuant to Section 14(1)(f) of the Electricity Regulation Act 1999. It is also made in accordance with clause 7.6 of the Infrastructure Agreement made between EirGrid plc and ESB under Article 18 of SI 445 of 2000.

The nature and extent of this proposed development is outlined below, and set out in greater detail in the Environmental Impact Statement (EIS) accompanying this application. This application for Approval has been submitted in accordance with Section 182 of the Planning and Development Act 2000, as inserted by the Planning and Development (Strategic Infrastructure) Act 2006.

This Report includes an overview of the Strategic Planning and Development policy context for the proposed development. This is set out in greater detail in Chapter 2 of Volume 1 of the EIS. At the outset, RPS expresses its professional consideration that the proposed development, essentially comprising the provision of major strategic electricity transmission infrastructure on the island of Ireland, is in accordance with governing European, National, Regional and Local Strategic and Statutory planning and development policy, and is consistent with good planning practice, and with the proper planning and sustainable development of the area.

1.1 The Developer

The construction of a second cross-border electricity interconnector, and associated development, comprises a co-ordinated all-island strategic electricity infrastructure project, and is being jointly proposed by EirGrid plc (on behalf of ESB Networks) and Northern Ireland Electricity (NIE). For the purpose of compliance with Statutory legislation, however, the overall strategic project is required to be separated into its jurisdictional elements. In this respect, concurrent applications for Approval of the proposed development are being submitted by EirGrid and NIE to the Competent Authorities of the Republic of Ireland and Northern Ireland respectively.

EirGrid plc (hereinafter for convenience referred to as EirGrid) is a State-owned commercial company, established in July 2006, and licensed by the Commission for Energy Regulation (CER) as the independent Transmission Systems Operator (TSO) for the Republic of Ireland. In its role as TSO, EirGrid is required to operate and maintain a safe, secure, reliable, economical and efficient electricity transmission system. Prior to the establishment of EirGrid, responsibility for the operation and management of the electricity transmission system in the Republic of Ireland was vested in ESB National Grid (ESBNG).

2.0 THE PROJECT

2.1 Introduction

As set out above, EirGrid and NIE are jointly and concurrently proposing the construction of a major cross-border electricity transmission infrastructure development, primarily consisting of an approximately 140 km long 400 kV overhead line, and associated infrastructure. The overall development is generally referred to in this instant application to An Bord Pleanála for Approval as **The Meath – Tyrone 400 kV Interconnection Development**. The overall proposed 400 kV Interconnection Development extends between the existing electricity transmission network in Northern Ireland, from a proposed new substation at Turleenan, Co. Tyrone, and the existing electricity transmission network in the Republic of Ireland, connecting to the existing Woodland substation, near Batterstown, Co. Meath.

The proposed development includes a new 400 kV substation in the vicinity of Kingscourt, Co. Cavan (specifically in the townland of Moyhill, Co. Meath, approximately 6 km south-west of Kingscourt); this will allow a tie-in of the proposed transmission circuit (generally running along a north-south orientation) with the existing Flagford-Louth 220 kV line (generally running along an east-west orientation and serving the North-East region of the Republic of Ireland). The tie-in of these existing and proposed transmission circuits is a key element of the planned strategic reinforcement of existing transmission infrastructure in the North-East region of the Republic of Ireland (as addressed in more detail at section 4.4.5 below).

In light of the overall length of the proposed development and its alignment across the two jurisdictions of the island of Ireland, it was considered appropriate that, for the purposes of corridor and route identification, evaluation and selection, public and stakeholder consultation, environmental assessment, and project scoping, the overall development should be de-constructed into three smaller project elements:-

- That portion of the overall development within an identified **Cross-Border Study Area**¹ in Northern Ireland, extending from the proposed substation at Turleenan, Co. Tyrone, to the border with the Republic of Ireland (approx. 35 km); this portion of the overall development is proposed by NIE;
- That portion of the overall development within a **Cross-Border Study Area** in the Republic of Ireland extending from the border with Northern Ireland to the planned substation in the vicinity of Kingscourt, Co Cavan, specifically at Moyhill, Co. Meath (approx. 48 km); this portion of the overall development, which includes the proposed diversion of the existing Flagford-Louth 220 kV transmission line into the proposed Moyhill substation, is proposed by EirGrid;
- That portion of the overall development within a **North-East Study Area**² extending from the proposed substation at Moyhill, Co. Meath, to the existing substation at Woodland, Co. Meath (approx. 57 km); this portion of the overall development is proposed by EirGrid.

¹ For the purposes of this application, and associated EIS, the **Cross-Border Study Area** is defined as that portion of the overall development extending between the proposed substation at Turleenan Co. Tyrone, and the proposed substation in the vicinity of Kingscourt, Co. Cavan (specifically at Moyhill, Co. Meath)

² For the purposes of this application, and associated EIS, the **North-East Study Area** is defined as that portion of the overall development extending from the proposed substation at Moyhill, Co. Meath to the existing substation at Woodland, Co. Meath

2.2 Overview of the Proposed Development

The project scope being proposed by EirGrid comprises that portion of the overall planned 400 kV Interconnection Development occurring within the Republic of Ireland. The proposed strategic electricity infrastructure development for which Approval is now sought from An Bord Pleanála consists of the following elements: –

- (1) Addition to substation equipment and an associated extension of the compound of the existing ESB Woodland substation, Co. Meath, primarily to include: construction of a new lattice steel gantry (31 m in height), and associated development including cable sealing ends, surge arresters and 250m length of 400 kV underground cable. The proposal also includes a western extension of the existing substation compound of approximately 0.7 hectares, requiring associated modifications to the existing perimeter fence of the substation, and associated site development works;
- (2) The addition of a new 400 kV circuit for some 2.8 km along the currently unused (northern) side of the existing double circuit 400 kV overhead transmission line extending westwards from Woodland substation to a point near the townland boundaries of Bogganstown and Curraghtown in Co. Meath;
- (3) The provision of a new single circuit 400 kV overhead transmission line and associated structures (including supporting towers ranging in height from 29 – 44 m), of some 55 km length, extending generally northwards from its interface with the existing double circuit line identified at (2) above, to a proposed 400 kV double circuit tower in the townland of Clonturkan, Co. Cavan;
- (4) A new 400 kV substation at Moyhill, Co. Meath. The overall site of the new substation, including lands for perimeter screening etc. is some 16.8 hectares. Two options for substation design are proposed in this application, as a final decision regarding the preferred option can only reasonably be made post-Approval, when tender contracts are confirmed. These options are: (a) an Air Insulated Switchgear (AIS) option, where electricity infrastructure is primarily sited externally, including control buildings (totaling 465 sq m, with a maximum height of 5 m), and associated electrical equipment and structures (with a maximum height of 29 m), set within a compound of approximately 5.3 ha. This option requires the demolition of an existing habitable house on the site. (b) a Gas Insulated Switchgear (GIS) option, where the electricity infrastructure is primarily sited internally, requiring a 220 kV switchgear/control building (totaling 677 sq m, with a maximum height of 11 m), a 400 kV switchgear/control building (totaling 519 sq.m. with a maximum height of 13 m) and associated electrical equipment and structures (with a maximum height of 27 m), set within a compound of approximately 1 ha. Both options require the provision of a proposed new vehicular access point onto the L-28043-1 road, and a new internal access road;
- (5) Diversion of the existing 220 kV Flagford – Louth overhead transmission line by means of a new double circuit 220 kV overhead transmission line, and associated structures, into the proposed new Moyhill 400 kV substation, County Meath. The proposed diverted line (with associated towers ranging in height from 21 – 55 m), will be 2.3 km long and will run from a point at the townland of Carrowreagh, Co. Cavan;
- (6) A new double circuit 400 kV overhead transmission line (approximately 1.4 km) and associated structures (ranging in height from 24 – 68 m) extending northwards from the new substation at Moyhill, Co. Meath to connect with the new 400 kV single circuit transmission line in the townland of Clonturkan Co. Cavan (as per (3) above);
- (7) The new single circuit 400 kV overhead transmission line and associated structures (ranging in height from 21 – 37 m) will extend generally northwards for a further approximately 46 km from the townland of Clonturkan County Cavan (as per (3) and (6) above) to a point where the line intersects with the jurisdictional border with Northern Ireland at the townlands of Lemgare/Coolartragh, Co. Monaghan.

For the purposes of this statutory Approvals process, it is also proposed that the new overhead line electricity infrastructure is sited within an identified wider corridor with a maximum width of 80 metres. Whilst the Applicant intends to construct the overhead transmission line along the line route as identified and proposed in this application, the practical experience and expertise of EirGrid in constructing such infrastructure is that there may be some requirement to facilitate minor movement of towers within the corridor during construction of the development.

Such minor movement is typically referred to as “Micro-siting” (addressed in more detail at Section 4.6 of Volumes 2a and 2b of the EIS), a long established practice in the construction of electricity line infrastructure which allows for detailed siting of tower locations to avoid previously unknown environmental, archaeological or other such constraints and features, which are only identified during post-Approval site specific ground monitoring and investigations, or which have occurred subsequent to the environmental investigation and survey undertaken in compiling the EIS (for example creation of a badger sett, bat roost, otter holt etc.); it is a key preference that mitigation of potential environmental impact is achieved through avoidance of such impacts, for example in this instance by the minor movement of towers.

The micro-siting of towers may also be undertaken to facilitate a landowner, for example to minimise intrusion into an existing agricultural practice, or to allow consideration of, and facilitate the development of subsequently proposed but as yet unbuilt dwellings. Again this is intended to comprise the mitigation by avoidance of potential impact upon material assets and human beings.

It must be noted that the environmental assessment undertaken in respect of the proposed electricity line and associated infrastructure has considered the full extent of the proposed 80m wide corridor within which the proposed line will be located. Such identified constraints serve to limit the extent of deviation of the line within the corridor – such constraints are identified in the EIS accompanying this application. The process of micro-siting always has regard to known environmental constraints particularly in relation to residential amenity, ecologically sensitive areas, and direct and indirect impacts on archaeological sites and landscape/visual impacts. In short, the micro-siting of the proposed development will never result in some greater environmental impact than has been identified in the EIS for the proposed line. It is the case that the applicant will construct the proposed development in accordance with the plans and particulars submitted with the application, including the mitigation measures set out in the EIS.

The proposal to site the electricity line and associated structures within a wider corridor of a maximum of 80m width (being 40 metres on either side of the line) is consistent with the provisions of Class 28 of Schedule 2 (Part 1) of the Planning and Development Regulations 2001, which confirms as exempted development:-

“The carrying out by any electricity undertaking consisting of the construction or erection of an overhead transmission line not more than 40 metres from a position in respect of which permission for such line was granted and which otherwise complies with such permission, but not a line in respect of which a condition attached to the relevant permission imposed a contrary requirement”.

Whilst the provisions of Class 28 may not apply in respect of this instant proposed development, the long established principle of flexibility required in the siting and construction of electricity line infrastructure is acknowledged within the Planning and Development Code; it is this principle that is now sought to be applied in respect of the proposed development.

In summary, the proposed development comprises the construction and operation of an electricity transmission line and associated infrastructure located within an identified corridor of a maximum of 80m width, the full extent of which has been subject to environmental assessment. It also includes the proposed substation, and associated substation works. Reference in the application particulars to “alignment” refer to the proposed line and wider proposed 80m corridor.

A detailed description of the proposed development, including the consideration of alternatives, is contained within the EIS accompanying this application.

3.0 APPLICABLE LEGISLATION

3.1 Strategic Infrastructure

That portion of the overall proposed development located within the Republic of Ireland falls within the scope of the Planning and Development Acts 2000-2007. Specifically, section 4 of the Planning and Development (Strategic Infrastructure) Act 2006 (hereinafter for convenience termed the SIA) inserted new sections after Section 182 of Part XI of the Planning & Development Act 2000 (Sections 182A-182E), which relate to Provision of Electricity Transmission and Gas Infrastructure. Section 182A of the SIA provides that, where a person (the “undertaker”) intends to carry out a “*development comprising or for the purposes of electricity transmission*”, an application and an EIS shall be prepared and submitted to An Bord Pleanála for Approval of the development. This now constitutes the appropriate consent procedure for strategic infrastructure in Ireland, which has been followed in the preparation and submission of this instant application for Approval.

Section 182A(9) confirms that “transmission” in relation to electricity shall be construed in accordance with Section 2(1) of the Electricity Regulation Act 1999:-

“transmission”, in relation to electricity, means the transport of electricity by means of a transmission system, that is to say, a system which consists, wholly or mainly, of high voltage lines and electric plant and which is used for conveying electricity from a generating station to a substation, from one generating station to another, from one substation to another or to or from any interconnector or to final customers but shall not include any such lines which the Board may, from time to time, with the approval of the Commission, specify as being part of the distribution system but shall include any interconnector owned by the Board*.*

(* “Board” refers to the Electricity Supply Board - ESB)

The SIA clarifies that “*transmission*” shall also be construed as meaning the transport of electricity by means of (a) a high voltage line where the voltage would be 110 kilovolts or more, or (b) an interconnector, whether ownership of the interconnector will be vested in the undertaker or not. Having regard to the above, the definition of “*development comprising or for the purposes of electricity transmission*” clearly incorporates all development – works and structures - associated with this proposed development.

Section 182E of the SIA requires that a prospective applicant shall, prior to making an application for approval for electricity transmission development; enter into consultations with An Bord Pleanála. During this process, An Bord Pleanála may

give advice regarding the application, including the procedures involved and what considerations related to proper planning and sustainable development and the environment, may, in its opinion, have a bearing on its decision. As confirmed in the EIS accompanying this application, EirGrid, with its consultants, have engaged in consultation with An Bord Pleanála prior to submitting the application.

3.2 Environmental Impact Statement (EIS)

Schedule 5 of the Planning and Development Regulations 2001 (as amended) requires an EIS to be carried out for a project involving “*construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometres.*” This project falls within this requirement.

Schedule 6 of the Planning and Development Regulations 2001 (as amended) sets out the type of information to be contained in an EIS. A single Environmental Impact Statement has been prepared in respect of the proposed development, which also addresses matters of the cumulative and trans-boundary impacts of the overall development. The EIS has been structured as follows, having regard to the geographical portions of the overall project as set out at Section 2.1 above:-

- **Volume 1** is a unifying document dealing with common issues of the project, including: Strategic Need for the Project; Public Consultation; Transmission and Technology Alternatives; Route and Substation Alternatives; and an Overview of Environmental Impacts (including cumulative/trans-boundary impact);
- **Volume 2 Part A**, prepared by TOBIN Consulting Engineers, covers the Woodland – Moyhill 400 kV Transmission Line element of the proposal;
- **Volume 2, Part B**, prepared by ESBI and AOS Planning Limited, covers the Moyhill to Border (Lemgare) 400 kV Transmission Line element of the project;
- **Volume 3, Parts A and B** contains the figures associated with Volume 2;
- **Volume 4, Part A and B** contains the Appendices associated with Volume 2;
- **Volume 5, Part A and B** contains the Non-Technical Summaries associated with Volume 2;
- **Volume 6**, contains a Non-Technical Summary of the overall EIS.

This EIS has been prepared in accordance with Schedule 6 and conforms to the relevant requirements as specified therein. The EIS has also been undertaken having regard to the Environmental Protection Agency (EPA) *Guidelines on information to be contained in Environmental Impact Statements (EPA 2002)* and *Advice Notes on Current Practice in preparation of Environmental Impact Statements (EPA 2003)* and the European Commission document “Guidance on EIA, EIS Review” (2001).

3.3 Transboundary Issues

Having regard to the nature of the project as an all-island linear infrastructure development which extends across the jurisdictions of both the Republic of Ireland and Northern Ireland, the full extent of the environmental effects and interactions of the overall Meath – Tyrone 400 kV Interconnection Development has been assessed in the EIS. These issues are examined in Volume 1, Chapter 6 of the EIS, and in the relevant chapters of Volume 2, Part A and Part B.

4.0 PROJECT NEED

4.1 Overview of Transmission System and Interconnection

As set out in more detail in Chapter 2 of Volume 1 of the EIS, in the Republic of Ireland the transmission system comprises 400kV, 220kV and 110kV networks. In Northern Ireland, the transmission system comprises a 275 kV network (designed for 400 kV) and a 110 kV network. The systems are relatively small and isolated in comparison with other transmission systems in Europe.

The only existing interconnector between the separate transmission systems of the two jurisdictions - the Louth-Tandragee 275 kV Interconnector - was commissioned in 1970. Two 220 kV lines between substations in North Dublin and Louth were commissioned in the following years to facilitate interconnection transfers. In addition, two 110 kV circuits were commissioned in 1994 to provide cross border support between local networks (i.e., Letterkenny, Co Donegal – Strabane, Co Tyrone and Corraclassy, Co Cavan – Enniskillen, Co Fermanagh). The existing 275 kV interconnector operates in parallel with the two 110 kV tie-lines; however, the 275 kV interconnector forms the only effective large scale interconnection pathway between the transmission systems of Northern Ireland and the Republic of Ireland. The two 110 kV tie-lines do not, on their own, have sufficient power carrying capacity to securely hold the transmission systems together.

4.2 Limitations of Existing Interconnection

The nature and limited extent of the existing interconnection infrastructure means that currently there is a risk that a single event (such as lightning strike, accidental or deliberate damage) could cause a trip of the existing 275 kV interconnector. In such a scenario, interconnection between the two transmission systems would be lost entirely, in a scenario known as “system separation”.

In the context of such a risk scenario the energy regulators of both jurisdictions have agreed that the potential total quantity and direction of power flow on the interconnector – the Total Transfer Capacity (TTC) - be significantly constrained to operate below the level at which system stability can be ensured following an unexpected system separation. Therefore, whilst the existing double-circuit 275 kV interconnector could in theory carry power flows up to 750 MW per circuit, the actual TTC of the overall ‘Interconnector’ is limited to some 400-450 MW, and only 240-325 MW of this 400-450 MW is allocated for Single Electricity Market trading (see Section 4.4.1 below).

4.3 Limitations of the Existing Transmission Network in the North-East Region

There is also an identified concern that during certain operating scenarios which could potentially result in the outage of key 220 kV lines in the North-East region of the Republic of Ireland, the remaining lines serving the area could not maintain the voltage in the area at adequate levels, and the entire region would be at risk of voltage collapse. In this scenario, the electricity supply to a very large number of customers in this region would be lost. This is an unacceptable situation and therefore this network requires to be reinforced to mitigate this risk.

In the absence of such reinforcement, the transmission network in this region is approaching its limit to the demand it can supply. The only enduring solution to

resolving this issue by means of reinforcement of the existing transmission system in the North-East region, involves the provision of a new circuit to serve the area, as simply upgrading existing circuits will not overcome the problem.

4.4 Justification for the Proposed Development

The justification for the proposed Meath – Tyrone 400 kV Interconnection Development is on the basis of the following:

- The Single Electricity Market (SEM);
- Greater Connection of Renewable Energy Sources;
- Improve System Security of Supply;
- Generation Capacity Saving; and
- Opportunity to Reinforce the North-East of the Republic of Ireland

These are addressed below, and in more detail in Chapter 2 of Volume 1 of the EIS.

4.4.1 The Single Electricity Market (SEM)

In response to EU Directives, the Single Electricity Market (SEM) establishes that all electricity generated, consumed, imported or exported in Europe must be traded through a single wholesale market. The efficient operation of the SEM on the island of Ireland requires an adequate and appropriate linkage of the separate transmission networks in such a way that they operate as a single synchronised AC transmission network. To achieve this, the level and reliability of interconnection must be such that demand for cross border power flows can be met at all times even during system disturbances.

The existing reliance on a single interconnector is considered a significant constraint to ensuring an efficient SEM. RPS expresses its professional consideration that the construction of an additional high capacity interconnector will increase the transfer capability between the two systems and will significantly facilitate the full realisation of a SEM on the island of Ireland, thereby ensuring full accordance with the provisions of the governing Directive.

4.4.2 Greater Connection of Renewable Energy Sources

The geography and topography of Northern Ireland and the Republic of Ireland is such that both jurisdictions have substantial potential wind and other renewable energy resources. The development of these resources is expected to bring significant benefits to both economies, whilst reducing dependence on imported fossil fuels. The Government White Paper Energy Policy Framework 2007-2020 – *Delivering a Sustainable Energy Future for Ireland* sets targets for production of energy from renewable sources for the year 2020. In particular, Strategic Goal 2: *Accelerating the Growth of Renewable Energy Sources* sets out an action to achieve 33% of electricity consumption on a national basis from renewable energy sources by 2020; this target was subsequently increased in October 2008 to 40%.

The introduction of the all-island Single Electricity Market in conjunction with EU directives regarding renewable generation sources has resulted in an increase of requests to connect renewable and conventional generation sources to the all-island transmission system. In the Republic of Ireland, the Commission for Energy Regulation (CER), in keeping with the government targets has directed EirGrid to initiate the “Gate 3” process, which will offer connections to the Irish transmission network of approximately 4,000 MW of renewable generation. The Gate 3 process

also allows for connection of approximately 2,000 MW³ of conventional generation, bringing the total amount to receive connection offers to 6,000 MW; to put this figure into context, the all-time peak demand of the Republic of Ireland's electricity system is 4,906 MW.

It is clear that the planned level of electricity generation, particularly from renewable sources whether offshore or onshore, must be assisted by enhanced high quality and high capacity transmission infrastructure across the island of Ireland, in order to deliver that generated electricity to key population centres and National and International markets. RPS expresses its professional consideration that the realisation of the overall proposed Meath – Tyrone 400 kV Interconnection Development (including that proposed in this instant application) is a crucial element of planned transmission infrastructure development on the island of Ireland.

4.4.3 Improve System Security of Supply

As noted above, the transmission systems of the Republic of Ireland and Northern Ireland are relatively small and isolated, with a low level of interconnection. As such, they are exposed to a greater risk of loss of supply than would be the case in the larger and highly interconnected systems in mainland Europe.

In the context of the SEM, as an all-island wholesale electricity market develops, it is likely to increasingly be the case that over time, customers and suppliers in one jurisdiction will rely on producers in the other jurisdiction. This is crucially dependent upon an assured security of a reliable electricity supply across the island of Ireland, with a consequent need to eliminate potential risk of loss of supply in either or both systems, and the risk of system separation.

As noted above, the existing potential carrying capacity of the existing North-South interconnector is required to be significantly constrained in order to protect system security of supply on the island of Ireland. In this context, RPS expresses its professional consideration that the realisation of the overall proposed Meath – Tyrone 400 kV Interconnection Development will ensure the maintenance of system stability between the transmission systems of the Republic and Northern Ireland.

4.4.4 Generation Capacity Saving

A second strategic interconnection between the Republic of Ireland and Northern Ireland will reduce the number of generating plants required within the two jurisdictions on the island of Ireland. This will reduce separate capital investment in generating power stations and other expensive associated strategic infrastructure.

Furthermore, by making interconnection robust, both system operators can place reliance upon the spare generation in the other's system in the event of the loss of power from a generator in either jurisdiction. Having regard to this, RPS expresses its professional consideration that the realisation of the overall proposed Meath – Tyrone 400 kV Interconnection Development is entirely appropriate in the context of provision of expensive capital infrastructure, and is in accordance with the proper planning and sustainable development of the area.

³ Subject to CER final decision

4.4.5 Opportunity to Reinforce the North-East Region of the Republic of Ireland

As described at section 4.3 above, and at Chapter 2 of Volume 1 of the EIS, the North-East region of the Republic of Ireland will in the future experience a risk of voltage collapse if there is not the timely reinforcement of its electricity transmission infrastructure. Having regard to the provisions of the National Spatial Strategy (see section 5.2.2 below), the North-East region will accommodate the strategic development of identified gateways and hubs, thereby requiring the adequate and appropriate timely provision of associated critical infrastructure.

RPS expresses its professional consideration that the realisation of the overall proposed Meath – Tyrone 400 kV Interconnection Development, including the proposed tie-in of the new north-south transmission circuit with the existing east-west Flagford-Louth circuit via a proposed new substation at Moyhill, Co. Meath, near Kingscourt, Co. Cavan, will provide the key infrastructure to facilitate the reinforcement of the existing transmission infrastructure in the North-East region.

5.0 STATUTORY AND STRATEGIC POLICY CONTEXT

The proposed overall development is sanctioned at all levels of Statutory and Strategic planning policy. A brief analysis on how the proposed development complies with these policies and guidance is set out below; additional analysis is set out in Chapter 2 of Volume 1 of the EIS which accompanies this application.

5.1 EU Policy Context

RPS expresses its professional consideration that the overall proposed Meath – Tyrone 400 kV Interconnection Development complies with a number of EU directives and objectives relating specifically to:

- Meeting the interconnection target of 10% of installed generation capacity, as set out in the Single Energy Market Directive (2003/45/EC);
- Reinforcement of the security of energy supply, as set out in the Safeguarding Security of Supply Directive (2005/89/EC); and
- Improved connection of renewal energy sources (in particular wind power), as set out in the Renewables Directive (2001/77/EC) as amended by the National Renewable Action Plans Directive (2009/28/EC).

Of note, EirGrid and NIE have received EU funding under the TEN-E programme for 50% of the costs associated with the pre-construction development and design of the proposed development. This is consistent with the Communication from the European Commission to the European Parliament and The Council regarding energy infrastructure and security of supply, dated 10th December 2003, which noted *inter alia* that there is currently insufficient interconnection between the Republic and Northern Ireland. In this context, RPS expresses its professional consideration that such funding is a clear acknowledgement that additional interconnection between the Republic and Northern Ireland is considered to fulfill an important strategic need.

5.2 National Policy Context

5.2.1 The Government White Paper

The primary objectives of the energy policy set out in the White Paper - *Delivering a Sustainable Energy Future for Ireland* (2007) are security of supply, environmental stability and economic competitiveness. Strategic Goals include *inter alia*:

- Ensuring that electricity supply consistently meets demand;
- Enhancing the diversity of fuels used for power generation;
- Accelerating the growth of renewable energy sources;
- Ensuring affordable energy for everyone.

In relation to renewable technologies, the White Paper states “*We will achieve 33% of electricity consumption from renewable sources by 2020 through support for research, development, commercialisation, and technology transfer as well as grid connections and planning issues for offshore wind, ocean technology and biomass*”.

In relation to the goal of delivering electricity over reliable and secure networks, the White Paper states: “*We will continue to meet regional development requirements by supporting the major electricity investment programme underway and planned by ESB networks in the high voltage transmission network and distribution network and connections to 2010 and beyond as approved by the CER*”.

In relation to interconnection, the White Paper states “*We will ensure delivery of a second North South electricity interconnector by 2011 which will more than double the existing cross-border electricity transfer capacity to over 680 MW*.”

In this context, RPS expresses its professional consideration that the realisation of the overall proposed Meath – Tyrone 400 kV Interconnection Development will achieve key objectives of the Government White Paper in respect of security of electricity supply, facilitation of renewable energy generation, reinforcement of the high voltage transmission network, and specific delivery of a second interconnector.

5.2.2 The National Spatial Strategy for Ireland 2002-2020

The National Spatial Strategy sets out a 20 year strategic vision for the spatial planning and development of the Republic of Ireland. It outlines how a strengthened network of cities, towns and rural communities and their resources will be mobilised and complemented by social and physical infrastructure, to create balanced National development.

Prime considerations in terms of spatial policies relating to National energy infrastructure development include “*developing energy infrastructure on an all island basis to the practical and mutual benefit of both the Republic and Northern Ireland*”, and “*Strengthening energy networks in the West, North West, border and North Eastern areas in particular*”.

RPS expresses its professional consideration that the realisation of the overall proposed Meath – Tyrone 400 kV Interconnection Development will assist in realising these spatial policies. In particular, the identified spatial growth of key gateways and hubs of the North-East region, and within the Greater Dublin Area will be supported by the timely provision of adequate and appropriate strategic electricity transmission infrastructure.

5.2.3 The National Development Plan 2007-2013

The opening chapters of the NDP address “*Strategic Framework*”, with Chapter 5 addressing – “*All-Ireland Co-operation*”. This chapter includes a subsection on Energy, specifically including Electricity Interconnection (p.101). This states:-

“A key enabler for an All-island Energy Market is the removal of existing gaps and bottlenecks in electricity or gas infrastructure which adversely affect cross-border trade. The planned second North South electricity Interconnector, which will be operational by 2012 at the latest, will underpin the Single Electricity Market. It will enhance security of supply and double the existing cross-border electricity transfer capacity to over 600MW. This will contribute to a more robust electricity network capable of delivering long term benefits to both economies.”

RPS expresses its professional consideration that the realisation of the overall proposed Meath – Tyrone 400 kV Interconnection Development, as identified in the National Development Plan, will serve to enhance security of electricity supply on the entire island of Ireland, and will ensure appropriate transfer capacity, to the benefit of the proper planning and sustainable development of the area.

5.2.4 GRID25

GRID25 (October 2008) is EirGrid’s long-term development strategy. Its overall stated goal is “*to develop the network economically to reliably meet anticipated transport needs of users of the Grid. In achieving this goal, GRID25 supports the Government’s priority actions of increasing the penetration of renewable energy technologies and of improving energy efficiency and energy savings*”. In this context, EirGrid welcomes the statement of intent contained in the Renewed Programme for Government (October 2009) to “*implement the GRID 25 electricity grid plan to ensure we deliver on our ambitious renewable energy targets*”.

GRID25 specifically provides for the second North South Interconnector and associated reinforcement of the transmission network of the north-eastern region of the Republic of Ireland. It notes the following in this regard (p.29):

“The area shares a border with Northern Ireland which makes the region and the interconnector that will run through it significantly important to the All-Island Single Electricity Market. The 220kV and planned 400kV transmission network in the region provides a strong power corridor between Dublin and Belfast.”

RPS expresses its professional consideration that the realisation of the overall proposed Meath – Tyrone 400 kV Interconnection Development, as identified in Grid 25, is part of the far wider planned long-term strategic enhancement of electricity transmission infrastructure across the island of Ireland, and will assist in realising the overall strategic objectives of Grid 25.

5.3 Regional Policy Context

5.3.1 Regional Planning Guidelines for the Border Region

The National Spatial Strategy has identified reliable and effective energy systems such as electricity to power industry and services as prerequisites for effective regional development. In this context, primary considerations relevant to the Border Region are *‘the development of energy infrastructure on an all-island basis and the strengthening of energy networks in the West, North West, Border and North*

Eastern areas in particular.’ Priorities include the improvement in reliability of supply to the North-West and Border and North-Eastern parts of the country and strategic strengthening of the electricity grid serving particular clusters of employment related demand in peripheral areas.

The review process for the Guidelines (2010–2022) is currently underway. In relation to energy it states inter alia:

“The development of more sustainable, competitive, diverse and secure supplies of electricity to support economic and social development, is a key challenge for the Region. Extending the network into Northern Ireland and the UK through interconnectors will provide the Region, and the Country, with a secure and reliable electricity supply into the 21st Century”.

RPS expresses its professional consideration that the realisation of the overall proposed Meath – Tyrone 400 kV Interconnection Development will assist in meeting this stated challenge over the next decades.

5.3.2 Regional Planning Guidelines for the Greater Dublin Area

The Guidelines set out six goals which it aims to deliver as part of comprehensive strategies. The relevant Goal No. 5 is as follows; *“To provide a coordinated spatial organisation for services infrastructure (including water, wastewater, electricity, gas & telecommunications) in designated corridors that supports and facilitates the orderly integrated development of the region in a sustainable manner: This will be easier to achieve if a strong spatial pattern is established and these Regional Planning Guidelines envisage the concentration of population within a pattern of corridors”.* The achievement of this Goal will primarily occur through appropriate development policies and objectives of relevant County Development Plans.

As part of the overall Transportation and Infrastructure Strategy, Section 8 addresses the issues of Infrastructure including energy networks. Specifically in relation to energy, the guidelines recognise that Ireland’s continued economic growth has resulted in a marked increase in the consumption of electricity since 1999. In light of its duty to promote security of supply, the guidelines note that the CER has initiated a number of measures to increase generation capacity in Ireland. It is expected that when the network renewal programme is completed, it will deliver considerable improvements in quality and safety in the distribution network.

The Guidelines are currently in the process of being reviewed. The Directors Report on Public Consultation at Pre-Draft stage refers to GRID 25 and its observations and proposals in relation to the East Region and comments as follows:-

“The Regional Planning Guidelines will need to examine the critical investments and elements required to ensure competitiveness and supply security whilst seeking to ensure that proper planning and environmental concerns are core to the process and that polices regarding future and existing key infrastructure corridors are included.”

RPS expresses its professional consideration that the realisation of the overall proposed Meath – Tyrone 400 kV Interconnection Development will assist in meeting this stated challenge over the next decades, in the context of proper planning and sustainable development, including the protection of the scarce or sensitive environmental resources of the region..

5.4 Local Policy Context

The proposed development traverses the administrative areas of Meath County Council, Cavan County Council and Monaghan County Council. EirGrid has engaged with the Councils throughout the route selection and pre-planning phases of the proposed development; it has also taken cognisance of the policies set out in their respective Development Plans.

All of the development plans confirm a commitment for greater interconnection between the electricity systems of the two jurisdictions and/or support reinforcement of the existing transmission systems in order to promote growth and investment in the respective counties.

Specific policies of the County Development Plans of each of these Councils, in particular addressing the provision of infrastructure, and the protection of the natural and built environments, have been given careful consideration in the routing and design of the proposed Interconnection Development. This is addressed in more detail in Chapter 2 of Volume 1 of the EIS which accompanies this application.

Of particular note in this regard, Section 4.4.1 of the Cavan County Development Plan 2008-2014 states that *“the development of secure and reliable electricity transmission infrastructure is recognised as a key factor for supporting economic development and attracting investment to the area”*. It supports the *“provision for new high voltage electrical infrastructure, including high voltage transformer stations and new overhead transmission power lines”*. It is acknowledged that *“this infrastructure will be required for the reinforcement of the transmission network, related to growing electricity demand from existing customers, as well as, the connection of new generation and large demand customers e.g., industry”*.

In addition, the Meath County Development Plan 2007-2013 states that the availability of energy is of critical importance to the continued development and expansion of employment in County Meath. It states that: *“The Planning Authority recognises the essential requirements for electricity production and distribution. The two main energy networks servicing Co Meath are electricity and gas. With increased residential development in the county and a drive for more industrial, commercial and employment generating uses, it will be important to ensure that the capacity of the energy networks is sufficient to meet these demands”* (page 180)

RPS expresses its professional consideration that the realisation of the overall proposed Meath – Tyrone 400 kV Interconnection Development is consistent with the approaches of the various County Development Plans to ensure an adequate and appropriate provision of electricity supply to the counties, to facilitate existing and planned growth. In addition, having regard to other policies and objectives of the various County Development Plans regarding protection of the natural and built environment and heritage, RPS expresses its professional consideration that the nature, form, extent and alignment of the overall proposed Meath – Tyrone 400 kV Interconnection Development has had careful regard to these policies and objectives. It ensures an appropriate balance between the identified necessary provision of such major new strategic electricity transmission infrastructure – in the interest of the common good - and the protection of local environmental resources, in the context of proper planning and sustainable development.

6.0 PUBLIC AND STAKEHOLDER CONSULTATION

Structured consultation with statutory consultees was carried out at various stages of the project to ensure that their views could be considered by the Project Team as the project design of the proposed development progressed. This preceded the formal statutory EIA consultation undertaken by the respective EIA consultants once the preferred route had been selected.

Extensive non-statutory consultation took place by or on behalf of EirGrid between September 2007 and September 2009 in respect of the Interconnection Development. Such consultation specifically sought to inform/ elicit opinion from the public and other interested parties on all matters relating to Project.

The details in respect of the consultation process are set out in Chapter 3 of Volume 1, and separately in Chapter 2 of Volume 2, Parts 2a and 2b, of the EIS.

7.0 CONCLUSION

It is clear from the plans and particulars of the application, and in particular the EIS prepared in respect of the proposed development, and from supporting documentation referenced in the EIS, that the proposed Meath - Tyrone 400 kV Interconnection Development comprises a crucial element of the overall planned roll-out of strategic electricity transmission infrastructure on the island of Ireland.

The realisation of the proposed development will assist in ensuring the meaningful operation of a Single Electricity Market on the island of Ireland in accordance with the governing European Directive, will enhance connection to the electricity networks of planned significant new renewable generation sources on the island – also in accordance with governing European Directive, will meet Government targets for renewable energy production as set out in its White Paper, and will assist in ensuring an appropriate security and reliability of electricity supply to existing and future domestic and commercial consumers, in accordance with National strategic planning documents and guidelines.

The specific nature, form and alignment of the proposed development has been carefully identified in consideration of Statutory designations, and Regional and Local Development Plan policies and objectives and, in particular, the consideration of alternative technologies and alignments.

Overall, RPS expresses its professional consideration that the realisation of the overall proposed Meath – Tyrone 400 kV Interconnection Development as a major strategic electricity transmission infrastructure development, is in accordance with governing European, National, Regional and Local planning and development policy, with good planning practice, and with the proper planning and sustainable development of the area, including the protection of the environmental and other amenities thereof.