

North-South 400kV Interconnection Development

# Final Re-evaluation Report APPENDIX B

Response to Submissions and Other Engagement arising during the Re-evaluation Process



Part Funded by the EU-TEN-E Initiative







## TABLE OF CONTENTS

1	THE R	RE-EVALUATION PROCESS AND CONSULTATION	1	
	1.1	The Preliminary Re-evaluation Report	1	
	1.2	The Consultation Process	2	
	1.3	Consultation Terms of Reference	4	
	1.4	Parallel Government Endorsed Review and Consultation on Matters Related to the	he	
		North-South Interconnection Project	5	
	1.5	Nature of Feedback	5	
		1.5.1 Written Feedback	5	
		1.5.2 General Landowner Feedback	7	
		1.5.3 Other Engagement Feedback	8	
		1.5.4 Scope of the Responses	10	
2	RESP	RESPONSES TO WRITTEN SUBMISSIONS, AND PROPOSED AMENDMENTS ARISING 11		
	2.1	Written Feedback	11	
	2.2	Submission FS-1:	11	
	2.3	Submission FS-2:	14	
	2.4	Submission FS-3:	21	
	2.5	Submission FS-4:	23	
	2.6	Submission FS-5:	26	
	2.7	Submission FS-6:	27	
	2.8	Submission FS-7:	28	
	2.9	Submission FS-8:	31	
	2.10	Submission FS-9:	34	
	2.11	Submission FS-10:	37	
	2.12	Submission FS-11:	39	
	2.13	Submission FS-12	40	
	2.14	Submission FS-13:	40	
	2.15	Submission FS-14:	43	
	2.16	Submission FS-15:	45	
	2.17	Submission FS-16:	47	
	2.18	Submission FS-17:	52	
	2.19	Submission FS-18:	53	
3.	RESP	ONSES TO LANDOWNER ENGAGEMENT AND PROPOSED AMENDMENTS		
	ARISING			
	3.1	Landowner Feedback	55	
	3.2	Issue 1 - Is there an actual need for the project given the economic downturn?	55	
	3.3	Issue 2 - Could it run along a disused railway line?	56	
	3.4	Issue 3 - Why is the substation at Moyhill no longer deemed necessary?	56	

4.

5.

3.5	Issue 4 - Can EirGrid prove that no adverse health impacts will be associated with	ו the
	project if it proceeds?	57
3.6	Issue 5 - Why can the line not be put undergrounded?	59
3.7	Issue 6 - Impacts on air space including flying aircraft?	59
3.8	Issue 7- Concerns for impact on agriculture, with a request that in order to minimize	se
	crop damage construction should only occur "after the harvest"?	59
3.9	Issue 8 - Improvements on timing of landowner engagement, with a request for "r	nore
	time to review the information and literature"	60
3.10	Issue 9 – Is the line route as indicated fixed, or is there an element of flexibility at	this
	stage?	60
RESP	PONSES TO OTHER ISSUES AND PROPOSED AMENDMENTS ARISING	62
4.1	Other Engagement Feedback	62
CONC	CLUSIONS AND FEEDBACK	64
5.1	Conclusions	64

## TABLES

Table 1	Written Submissions Received during the Public Consultation Process in
	respect of the Preliminary Re-evaluation Report
Table 2	Specific Issues raised During Landowner Engagement
Table 3	Issues Raised During Other Engagement

### 1 THE RE-EVALUATION PROCESS AND CONSULTATION

#### 1.1 THE PRELIMINARY RE-EVALUATION REPORT

Since the withdrawal of the previous application in respect of the North-South 400 kV Interconnection Development Project in July 2010, EirGrid has commenced the process of preparing a new application for the proposed transmission infrastructure development by means of a comprehensive re-evaluation of the project.

A key deliverable of this re-evaluation process was the publication of a Preliminary Re-evaluation Report in May 2011, which documented the strategic issues and decisions that will inform and shape the project – including the need for the project, technical alternatives, the study area for the project, environmental and other constraints within the study area, identification of route corridor options, evaluation of route corridor options, and identification of an indicative line route within an identified preferred route corridor.

The Preliminary Re-evaluation Report, published in May 2011, formed the focus for structured public and stakeholder consultation (including engagement with directly affected landowners)<sup>1</sup> to obtain feedback on the content and conclusions of the Preliminary Report, as well as to discuss and address general and specific issues raised in respect of the overall proposed Interconnection Development.

The key conclusions of the Preliminary Re-evaluation Report were as follows:-

- 1. There is still a clear and immediate need for additional high-capacity interconnection with Northern Ireland. This will provide significant benefits for the country by means of the following:-
  - Improve competition in the all-island electricity market;
  - Improve security of electricity supply; and
  - Support the ongoing and future development of renewable power generation.
- 2. There remains a need (in the medium to long term) to reinforce the transmission network in the north-east area of the Republic of Ireland;

<sup>&</sup>lt;sup>1</sup> References to landowners in this Report should at all times be taken to mean those landowners who will be directly affected by the proposed development.

- The best technological solution for this project is a 400 kV Alternating Current (AC) single-circuit Overhead Line (OHL), running from the existing Woodland Substation in County Meath to a new substation at Turleenan in County Tyrone, which is being proposed separately by Northern Ireland Electricity (NIE);
- 4. Undergrounding of short sections of the 400 kV line is potentially feasible; however, to date no areas that would warrant undergrounding have been identified, other than the approach to Woodland substation;
- 5. The previously proposed intermediate substation in the vicinity of Kingscourt, County Cavan is not now expected to be required within the next decade and as a result it will not be included in the new application for planning approval of the North South 400 kV Interconnection development.
- Each of the route corridors identified as potentially feasible options for consideration in the previous application for planning approval of the North-South 400 kV Interconnection Development remain viable as a routing option for the proposed development;
- 7. Identified Route Corridor 3B in the Meath Study Area and Route Corridor A in the Cavan-Monaghan Study Area remain the corridors that are considered to strike the best balance between technical, environmental, community and other evaluation criteria. The identified indicative line route within these route corridors is broadly similar to that line route proposed in the previous application; however, some modifications have been made, including:-
  - Removal of the previously proposed Moyhill Substation near Kingscourt and certain modifications to the indicative line route associated with this; and
  - Local modification of the indicative line route to avoid new houses.

#### 1.2 THE CONSULTATION PROCESS

Following publication of the Preliminary Re-evaluation Report, there occurred an eight-week period of public consultation, from May 9th to July 1st, 2011, wherein EirGrid invited feedback from all interested stakeholders on the findings of the Report. Notwithstanding these specified dates, EirGrid considered all feedback that was received outside this period, and this feedback has been considered as part of the re-evaluation process.

In particular, as discussed at **Section 1.5.2**, EirGrid undertook a structured process of landowner engagement in respect of the conclusions of the Preliminary Re-evaluation Report, and facilitated engagement with other interested parties outside the specified consultation period.

In summary, consultation opportunities arose in respect of the Preliminary Re-evaluation Report between EirGrid and:-

- The general public;
- Landowners;
- Observers in respect of the previous application for approval for the Meath-Tyrone 400 kV
   Interconnection Development (An Bord Pleanála Reference VA0006);
- County Councils;
- Elected representatives;
- Project specific interest groups; and
- Local business and interest groups.

#### 1.3 CONSULTATION TERMS OF REFERENCE

As part of the consultation process, the Preliminary Re-evaluation Report and an associated community update brochure were made publicly available for consideration and comment. The documents were also published on EirGrid's project website. EirGrid invited stakeholders to provide feedback on the content of and findings in the Preliminary Re-evaluation Report, as well as the overall development, in order to learn of any new insights on aspects of the project, which would inform the Final Re-evaluation Report, and would contribute to the ongoing development of the project, ultimately leading to a new application for statutory consent.

In addition to this, as noted above, EirGrid pro-actively engaged with landowners and other stakeholders, to explain the project process, and to seek feedback on the conclusions of the Preliminary Re-evaluation Report, and on the development of the North-South 400 kV Interconnection Development project in general.

Stakeholders were invited to submit their feedback on the development and the content and findings of the Preliminary Re-evaluation Report. Stakeholders were also specifically asked to consider the following questions:-

- Has EirGrid considered all relevant criteria in determining that the optimum technical solution for this project is an overhead line? If not, what additional information should EirGrid consider, or what viable, cost-effective, technically appropriate, and environmentally sensitive alternative would you suggest?
- 2. Have all environmental criteria been appropriately considered? Is there anything else that you think should be looked at?
- 3. Are there any other key issues that EirGrid should consider before submitting a new application to An Bord Pleanála?

### 1.4 PARALLEL GOVERNMENT ENDORSED REVIEW AND CONSULTATION ON MATTERS RELATED TO THE NORTH-SOUTH INTERCONNECTION PROJECT

Outside the formal period of public consultation in respect of the Preliminary Re-evaluation Report, the Minister for Communications, Energy and Natural Resources commissioned an International Expert Commission (IEC) to review and report on *a case for, and cost of, undergrounding all or part of the Meath-Tyrone 400 kV Interconnection Development*. This review was published in January 2012; subsequently in June 2012, the Joint Oireachtas Committee (JOC) on Communications, Natural Resources and Agriculture published a report on its consideration of the IEC review. Following this, in July 2012, the Department of Communications, Energy and Natural Resources (DCENR) published a *Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure*.

The findings of the IEC review, the JOC report, and the subsequent Government Policy Statement, have been considered by EirGrid in the Final Re-evaluation Report; however, it is acknowledged by EirGrid that these documents were not available for public consideration during the period of the formal public consultation process in respect of the Preliminary Re-evaluation Report. In this context, this Feedback Report does not set out EirGrid's response to these various documents; rather they are addressed in the Final Re-evaluation Report. However, it should also be noted that consultation did form part of the IEC review, the JOC report, and the subsequent Government Policy Statement.

This Government endorsed review process commenced in July 2011 and concluded in July 2012 with the publication of the Government Policy Statement, which extended beyond the timeframe for public consultation in respect of the Preliminary Re-evaluation Report. However, it was considered premature to conclude and publish the Final Re-evaluation Report and supporting appendices, including this Report, in advance of the conclusion of this parallel review process.

#### 1.5 NATURE OF FEEDBACK

#### 1.5.1 Written Feedback

In total, 18 no. written submissions were received from stakeholders during the public consultation period in respect of the Preliminary Re-evaluation Report. These primarily comprised private individuals (a number of whom are also landowners) within the area of the indicative line route of the proposed North-South 400 kV Interconnection Development, as identified in the Preliminary Re-evaluation Report. Submissions were also received from statutory bodies and other organisations.

A summary of these stakeholders is set out in **Table 1** below and addressed in detail in **Section 2**. All submissions are allocated a specific reference number (e.g., FS-1, FS-2 etc.), which is used throughout this Feedback Report. This Report specifically acknowledges those statutory bodies and other organisations that made submissions. However, in the context of legal obligations in respect of data protection, this Report does not detail any information which might reveal the identity of private individuals/landowners. These parties will be separately informed of their unique reference number, enabling them to determine from this Report how their particular submission has been considered.

Submission		Statutory Body / Organisation	
No.	Submission Body	Detail	
FS-1	Private Individual		
FS-2	Landowner		
FS-3	Landowner		
FS-4	Landowner		
FS-5	Statutory Body	NRA	
FS-6	Landowner		
FS-7	Landowner		
FS-8	Statutory Body	Monaghan County Council	
FS-9	Organisation	NEPP	
FS-10	Organisation	Sinn Fein	
FS-11	Organisation	Monaghan Anti-Pylon Committee	
FS-12	Organisation	AMP/SAFE	
FS-13	Private Individual		
FS-14	Private Individual		
FS-15	Private Individual		
FS-16	Organisation	Doohamlet District Community Development Association	
FS-17	Private Individual		
FS-18	Private Individual		

## Table 1: Written Submissions Received during the Public Consultation Process in respect of the Preliminary Re-evaluation Report

In this Report, EirGrid and its consultants have sought to provide a comprehensive response to specific and detailed issues raised in these written submissions. These are set out in **Section 2**, and referenced by submission number. Where issues are referred to in general terms in the submissions, **Section 4** of this Report sets out the manner in which EirGrid and the Project Team has/will respond to them. This includes issues which are of relevance for the detailed design and EIA stages in the project development process e.g., the likely ecology, landscape and agronomy impacts associated with the development.

#### 1.5.2 General Landowner Feedback

EirGrid continues to consult with potentially directly affected landowners on the North-South 400 kV Interconnection Project, both as part of the re-evaluation process and in terms of the on-going development of the project in general. Specifically, this stakeholder consultation phase in respect of the Preliminary Re-evaluation Report included initial landowner engagement, based upon the identified indicative line route and other conclusions of the Preliminary Report. This consultation has *inter alia* sought to identify localised constraints, and other landowner-specific issues, that:-

- Might alter the conclusions of the Preliminary Re-evaluation Report (which would thereby be reflected in the Final Re-evaluation Report); and/or
- Inform the progress towards the Preferred Project Solution (based on the undertaking of more detailed surveys and studies to confirm that the indicative project solution is feasible, taking into account often competing environmental, technical and land-use issues); and/or
- Inform EirGrid of landowner-specific preferences regarding matters of siting of structures, and other site-specific matters regarding the planned Interconnection Development.

As much of the landowner engagement focused on more detailed site specific issues, including the project's potential impact on particular landholdings, this engagement was not necessarily restricted to more strategic issues raised in, or concerning, the Preliminary Re-evaluation Report. These more specific issues will be dealt with in on-going engagement with landowners during the subsequent detailed line design phase, which in turn will inform the final proposal and associated EIS.

During landowner engagement, a number of queries and issues were also raised that relate to the project and the re-evaluation process, which are considered to require a more detailed response. These issues have been grouped into a series of questions, set out in **Table 2** below, and are addressed in **Section 3** of this Report.

As noted above, how EirGrid and the Project Team has/will respond to particular issues which have been raised by landowners and which are of relevance for the detailed design and EIA stages in the project development process e.g., the likely ecology, landscape and agronomy impacts associated with the development is set out in **Section 4**.

It should be noted that landowner engagement, specifically regarding route selection and the siting of structures, will continue through the ongoing project development process.

Enquiry No.	Detail
E-1	Is there an actual need for the project given the economic turndown?
E-2	Is the line route, as indicated, fixed or is there an element of flexibility at this stage?
E-3	Could it go along an existing disused railway line?
E-4	Why is the substation at Moyhill no longer deemed necessary?
E-5	Can EirGrid prove that no adverse health impacts will be associated with the project if it proceeds? It is felt that <i>"too much emphasis has been placed on Whooper Swans and archaeology and not enough on human health"</i>
E-6	Why can the line not be undergrounded?
E-7	Concerns for impact on agriculture, with a request that in order to minimise crop damage, construction should only occur <i>"after the harvest"</i>
E-8	Impacts on air space, including flying aircraft
E-9	Improvements on timing of landowner engagement, with a request for <i>"more time to review the information and literature"</i> before meeting with landowner agents

Table 2: Specific Issues raised During Landowner Engageme
---

#### 1.5.3 Other Engagement Feedback

EirGrid continues to engage and consult with interested parties on the North-South 400 kV Interconnection Development (including outside of the formal re-evaluation consultation process which took place between May and July 2011). Such additional engagement and consultation has also raised issues of relevance, and accordingly, EirGrid and its consultants have taken the opportunity to include feedback from that consultation in this Report. This feedback has been collated from a variety of sources including written submissions, phone calls and meetings (including meetings with elected members).

For the purpose of clarity, this feedback has been set out on an issue-by-issue basis. It is noted that many of these issues were also raised in the written submissions or during landowner engagement received during the formal consultation process in respect of the Preliminary Re-evaluation Report. As with the other sources of feedback outlined above, this feedback includes a number of issues which are not directly relevant to the Preliminary Re-evaluation Report, but which are of relevance for the specific project design and EIA stages in the project development process (e.g., ecology, landscape, agronomy etc.). A summary of the issues raised is set out in **Table 3**. The manner in which EirGrid and the Project Team has/will respond to these issues is outlined in **Section 4** of this Report.

Issue Reference	Issue
I-1	Health
I-2	Ecology
I-3	Technology
I-4	Material Assets
I-5	Cultural Heritage
I-6	Landscape
I-7	Need
I-8	Compensation
I-9	Agriculture
I-10	Noise
I-11	Construction
I-12	Water
I-13	Geology

#### Table 3: Issues Raised During Other Engagement

#### 1.5.4 Scope of the Responses

In order to provide a clear and demonstrable link between feedback received during the consultation on the Preliminary Re-evaluation Report, and the substance and text of the Final Re-evaluation Report, the scope of this Report is confined primarily to matters concerning the scope and content of the Preliminary Re-evaluation Report.

Where there is a recommendation to alter, add or delete text of the Preliminary Re-evaluation Report in the Final Re-evaluation Report, this is indicated in this Report. Where feedback received relates to a subsequent stage of the project e.g. detailed line design or EIA, this is noted in the text.

For the avoidance of doubt, where a submission has resulted in amendments from the original content of the Preliminary Re-evaluation Report this is highlighted at the end of the response.

Other matters raised, and submissions made, outside of, or subsequent to, the consultation on the Preliminary Re-evaluation Report, but which have a bearing on the content of the Final Re-evaluation Report, have also fed into, and have been addressed in the Final Re-evaluation Report.

## 2 RESPONSES TO WRITTEN SUBMISSIONS AND PROPOSED AMENDMENTS ARISING

#### 2.1 WRITTEN FEEDBACK

EirGrid and its consultants have sought to accurately record issues and concerns set out in the submissions, and to provide a comprehensive response to same. Each submission has been reviewed, and a general overview provided. The key points of each submission (primarily using direct quotes from the submission) are also set out and numbered.

These key points below are repeated under the heading **RESPONSE TO KEY POINTS** and **a specific** response is provided for each point.

In order to provide a comprehensive response to each submission, in the context of similar issues having arisen in different submissions, it is considered appropriate that there is some necessary level of repetition of text and response in the various responses set out below. Where a response is effectively identical to a previous response, reference is made to that previous response.

#### 2.2 SUBMISSION FS-1:

**Overview:** This submission raises issues primarily in relation to the matter of over-grounding versus undergrounding transmission infrastructure. It is submitted by the observer that the proposal in its current overhead line (OHL) form is not acceptable to affected individuals and the wider community, having regard to matters such as evidence of superior technical advances and alternatives, commercial considerations, health related impacts and costs, landscape impact, property devaluation, impact on tourism, sporting activities and ecology and the implications for those whose income is reliant on such activities.

#### **KEY POINTS OF THE SUBMISSION:**

1. "The project will not go ahead as planned overground and it will if it goes ahead at all be undergrounded in accordance with the wishes of the affected individuals and the wider community"

"....overwhelming evidence of not only the technical ability but also the commercial sense of undergrounding vis à vis counteracting all the negatives associated with pylons" EirGrid needs to "face the reality that technology has not only moved on substantially, offering superior alternatives.,"

2. General concerns include "children's health and associated additional health costs, landscape mutilation and associated land and house property devaluation, animal and adult health and well being and the associated additional veterinary and medical bills, tourism loss, nature and wildlife, birdlife and fish life and associated loss of income from these activities, derived from people who previously would have enjoyed these pursuits"

The submission also refers to, and encloses, a copy of the observation made by the author to An Bord Pleanála during the previous application. This separate submission sets out that *"In principle we have no objection to progress or the strengthening of the Electricity Grid if this is necessary but we strongly object to the project going ahead as presently planned by EirGrid"*. Additional specific references in this separate submission include:

- "The negative consequences on the health of farmers and their families not to mention adjacent householders is huge from the hazardous EMF emissions from the pylons".
- "...the threat to the well-being of livestock and nature from EMF....".
- "The destruction of the lovely countryside and the devaluation of property as well as the negative impact on sporting activities adjacent to these structures will bring nothing but stress and unhappiness to the peoples of these areas".

#### **RESPONSE TO KEY POINTS:**

1: "The project will not go ahead as planned overground and it will if it goes ahead at all be undergrounded in accordance with the wishes of the affected individuals and the wider community".

"....overwhelming evidence of not only the technical ability but also the commercial sense of undergrounding vis à vis counteracting all the negatives associated with pylons".

EirGrid needs to "face the reality that technology has not only moved on substantially, offering superior alternatives...".

**RESPONSE:** While an underground alternative may be the preference of many of the stakeholders who have engaged on the project to date; EirGrid has to be guided by its technical expertise and experience in this matter.

EirGrid, as part of this project re-evaluation process, carried out a review to ascertain whether there have been any significant advances in underground cable (UGC) technology in recent years that might alter its previous conclusions in this matter. This review also examined whether there has been any recent change in the practices of other transmission infrastructure developers regarding the use of UGC and OHL on their transmission networks. The review focused primarily on Europe, but also referenced developments in other parts of the world. The purpose of the review was to verify whether EirGrid's position on the use of UGC on the Irish transmission system, with particular reference to the use of 400 kV UGC as is proposed in respect of the North-South 400 kV Interconnection Development, remains valid. The outcome of the re-evaluation process is detailed in Chapter 3 of the Preliminary Re-evaluation Report and is summarised below:-

- No new information has come to EirGrid's attention which would alter its opinion that a 400 kV OHL is the best technical alternative solution for this development, and that it would be significantly less costly than an equivalent UGC alternative;
- It would not be in compliance with good utility practice. In this regard, the electricity utilities in Europe still consider the use of OHL for 400 kV circuits to be best practice; and
- EirGrid is obliged, under the terms of its licence as Transmission System Operator (TSO), to develop the transmission system using least cost, technically and environmentally acceptable solutions. Based on all of the above, it is clear that in order to comply with this requirement, EirGrid must propose for the North-South 400 kV Interconnection Development, a solution that is substantially comprised of 400 kV OHL.

EirGrid's findings in this matter, as set out in the Preliminary Re-evaluation Report, are updated in the Final Re-evaluation Report with reference, in particular, to the subsequent review of the International Expert Commission on the case for, and cost of, undergrounding all or part of the North-South Interconnector and the subsequent Government Policy Statement.

2. General concerns include "children's health and associated additional health costs, landscape mutilation and associated land and house property devaluation, animal and adult health and well being and the associated additional veterinary and medical bills, tourism loss, nature and wildlife, birdlife and fish life and associated loss of income from these activities, derived from people who previously would have enjoyed these pursuits".

**RESPONSE:** Section 4 of this document sets out the manner in which EirGrid and the Project Team has/will respond to particular general issues raised (including health, landscape, property devaluation, tourism and ecology) as part of the progression towards a planning application.

#### 2.3 SUBMISSION FS-2:

**Overview:** This submission which is "only in relation to the portion of the line in the Cavan Monaghan Study Area and in particular Co. Monaghan", raises a number of issues specifically in relation to the methodology and findings of the Preliminary Re-evaluation Report.

#### Key points of the submission:

- 1. The exact same route has been chosen as 'preferred' or 'best fit' *"without any of the information gleaned from that planning process taken into account with regard to amelioration. It is contended that any new issues or insights will continue to be disregarded".*
- 2. "Due to the simultaneous targeting of landowners along the historically preferred route the Preliminary Re-evaluation Report is already considered by EirGrid to be a final document".
- 3. "..during the last planning process the new substation at Moyhill was seen as an integral part of the overall project and not just some add on. The Re-evaluation Report clearly states that the substation will be still required sometime in the future. In this respect the project has now been split resulting in a bad planning application".
- 4. "With regard to the southern part of the line it is contended that the two study areas should have been unified into one study area from Woodland to the Border (Lemgare). Instead the two study areas have been re-branded as the Cavan Monaghan Study Area (CMSA) and the Meath Study Area (MSA) with the same consultants employed to carry out the re-evaluation".
- 5. "The re-evaluation report is not a robust enough document as no re-evaluation or oversight has been undertaken by appropriate new consultants coming fresh to the project".
- 6. "The Re-evaluation Report fails to explain how this reinforcement of the North East will take place given the constraints on the existing 275 kV Tandragee to Louth Interconnector"
- 7. The Re-evaluation Report focuses on just two study areas Ecology and Landscape on which to make a value judgement as to the 'most preferred' or 'best fit' route corridor. However:
  - *i.* In terms of ecology, it is contended in the submission *"that Route Option B clearly comes out as 'most preferred' or 'best fit";* and
  - *ii.* In terms of landscape it is contended in the submission that *"the landscape rating should be equal or neutral with regard to Route Corridors A and B".*

8. The submission concludes setting out "Naturally, it goes without saying that whichever route emerges, it is contended that it is inappropriate and unsustainable development in the unique drumlin landscape through which it passes".

#### **RESPONSE TO KEY POINTS:**

1. The exact same route has been chosen as 'preferred' or 'best fit' *"without any of the information gleaned from that planning process taken into account with regard to amelioration. It is contended that any new issues or insights will continue to be disregarded".* 

**RESPONSE:** Given the extent of technical and environmental work that has occurred in respect of the proposed development over the last number of years, as well as the extent of public, landowner, and other consultation and engagement that has been undertaken in respect of the overall project, it is perhaps unsurprising that the previously proposed line route substantially comprises the indicative route as identified in the Preliminary Re-evaluation Report.

In this regard, EirGrid and its consultants have had regard to the considerable body of work previously undertaken in respect of that previous decision-making process, which includes technical, environmental, planning and other reports, the Environmental Impact Statement (and associated reports) and mapping prepared in respect of the previous proposal (which in itself was based upon, and made considerable reference to, other reports, documents and mapping). EirGrid has also carefully considered the considerable volume of written and oral submissions which were presented by or on behalf of prescribed bodies, other stakeholders, and the general public, during the previous application and which for information is now included as an Appendix to the Final Re-evaluation Report.

The re-evaluation process specifically considers those issues relevant for the purpose of the identification of the study area, constraints identification, comparative evaluation of route corridor options and identification of the preliminary indicative line route. The preliminary indicative line, as identified therefore takes account of relevant issues and information raised since 2009; and while the indicative line route identified is broadly similar to the previously proposed line route it incorporates important localised modifications as follows:-

 Modifications to the line route in order to take account of the construction and granting of permission for new houses occurring since the preparation and submission of the previous application in December 2009; and • Modification arising as a result of the decision not to proceed with the intermediate substation (in the area to the west of Kingscourt) as part of the proposed application for approval of the Interconnection Development.

Next steps in the development of the North-South 400 kV Interconnection Development project will include the presentation of a more detailed preferred route alignment, following further technical and environmental analysis, and the consideration of all feedback arising during the public consultation process in respect of the Preliminary and Final Re-evaluation Report. This will be presented in a Preferred Project Solution Report, which will be published in due course, and will be the subject of a separate round of public consultation and engagement, in particular including landowner engagement.

The actual necessity or appropriateness of further potential modifications will ultimately be confirmed in the application for the North-South 400 kV Interconnection Development. As part of the preparation of the Environmental Impact Statement (EIS), EirGrid and its consultants will assess any suggested local amendments, to determine their potential environmental impact. Where these can be accommodated without creating additional environmental impact, they will be further considered in dialogue with the landowner concerned, and may ultimately comprise part of the proposal. Where it is assessed that they would create additional avoidable significant environmental impact, it is likely that it will not be possible to include them as part of the final application for planning approval.

In light of the above, it is submitted that the contention that *"new issues or insights will continue to be disregarded"* is incorrect.

2. "Due to the simultaneous targeting of landowners along the historically preferred route the Preliminary Re-evaluation Report is already considered by EirGrid to be a final document".

**RESPONSE:** It is considered both reasonable and essential that the publication of the Preliminary Re-evaluation Report was followed by a process of initial landowner engagement. The purpose of this engagement was to obtain feedback from landowners regarding the conclusions of the Preliminary Re-evaluation Report, as well as to commence more detailed surveys and studies where possible, to inform the detailed line design.

EirGrid considers that the process of consultation, including landowner engagement, is an essential component of all projects developed by EirGrid and is enshrined within the Project Development and Consultation Roadmap that EirGrid adheres to in its projects. The overall process of re-evaluation of the North-South 400 kV Interconnection Development is clearly set out in the Preliminary Re-evaluation Report (and in the Final Re-evaluation Report).

The purpose of this report is therefore to capture, review and report on all matters raised in consultation, and to provide action points in respect of same, in particular demonstrating where issues and information raised during consultation in respect of the Preliminary Report has resulted in amendments to the Final Re-evaluation Report.

3. "..during the last planning process the new substation at Moyhill was seen as an integral part of the overall project and not just some add on. The Re-evaluation Report clearly states that the substation will be still required sometime in the future. In this respect the project has now been split resulting in a bad planning application".

**RESPONSE:** EirGrid has outlined in the Preliminary Re-evaluation Report that an intermediate substation, in the vicinity of Kingscourt (not necessarily at Moyhill) will not be required for at least ten years. Accordingly, in the context of proper planning and sustainable development, it will not be included in the planning application for the Interconnection Development but will instead be the subject of its own application at a later date, when the need arises. It is incorrect to suggest that this will result *"in a bad planning application"* having regard to the facts that:

- EirGrid is preparing a detailed environmental impact statement to support the proposed application for approval for the North-South 400 kV Interconnection Development. In due course, when the need becomes more immediate, EirGrid will submit an application for statutory consent of the intermediate substation, including the undertaking of environmental assessment, and ensuring that the planned substation is presented and assessed appropriately;
- As set out in the Preliminary Re-evaluation Report, it is considered reasonable, from a transmission planning perspective, to give some consideration in this current proposal to the location of a substation, in anticipation that it will be required at some future point in time. A suitable location is in the vicinity of the point of intersection of the planned North-South (Turleenan-Woodland) 400 kV OHL and the existing Flagford-Louth 220 kV OHL, as this will minimise the additional lengths of 400 kV and/or 220 kV circuits that have to be constructed in the future in order to connect in the new substation; and
- The consideration of the requirement at a later date for such a substation is part of the Grid25 plans for undertaking the development of the network in order to support a long-term sustainable and reliable electricity supply. In this regard, EirGrid has published its Strategic Environmental Assessment (SEA) on the Grid25 Implementation Programme (IP) which anticipates and avoids adverse environmental impacts arising from the IP. At this time (and until such a time as an application is brought forward) it is considered that this would be the appropriate framework within which to consider and assess the environmental impacts of the future development of an intermediate substation.

Furthermore, given the possibility of this substation being proposed at some point in the future and the possibility that it may be in the vicinity of Kingscourt (but not necessarily at Moyhill) it is considered reasonable that an environmental impact assessment of the potential impacts arising from the possible future development of the intermediate substation should be included in the EIS as part of the consideration of potential impacts on the environment, including cumulative impacts, for the North-South Interconnector Development.

4. "With regard to the southern part of the line it is contended that the two study areas should have been unified into one study area from Woodland to the Border (Lemgare). Instead the two study areas have been re-branded as the Cavan Monaghan Study Area (CMSA) and the Meath Study Area (MSA) with the same consultants employed to carry out the re-evaluation".

**RESPONSE:** The re-evaluation of the identification of the Project Study Area is set out in Chapter 4 of the Preliminary Re-evaluation Report including relevant consideration of the appropriate points of connection for a new North-South Interconnector and the background to the separate projects in the Republic of Ireland which became a single scheme.

EirGrid and its consultants have adopted an integrated approach to the consideration of the environment and technical constraints and in routing the transmission infrastructure within the overall larger study area south of the border. It has also rationalised the number of environmental specialists on the project team so that there is now only one specialist per environmental speciality responsible for the overall study area. This will ensure consistent methodologies for the identification of constraints, route corridors and line routes for both the CMSA and MSA.

It remains the view of EirGrid that it is appropriate to present the overall project in two portions, to facilitate review by the public and other parties of that portion of the scheme which is of most importance to them, rather than having to seek out this information as part of a much larger study area. This is consistent with how the project was previously presented to the public.

5. "The re-evaluation report is not a robust enough document as no re-evaluation or oversight has been undertaken by appropriate new consultants coming fresh to the project".

**RESPONSE:** It is the case that the considerable body of work undertaken in respect of that previous application for approval for the North-South Interconnection Development (and the years of feasibility work leading up to it) remains entirely relevant to the re-evaluation, and ongoing development, of this project. Against this background, it is considered that the introduction of new consultants at this time would not be of any benefit to the project.

6. "The Re-evaluation Report fails to explain how this reinforcement of the North East will take place given the constraints on the existing 275 kV Tandragee to Louth Interconnector".

**RESPONSE:** The observer notes correctly that the maximum permitted power transfer across the existing 275 kV Tandragee to Louth Interconnector is currently constrained to a level well below its actual power carrying capacity. This is as a direct consequence of the fact that there is currently only one high capacity North-South Interconnector. However the development of a second high capacity North-South Interconnector will effectively eliminate this constraint. It is in this circumstance, and as explained at Section 4.1 of the Preliminary Re-evaluation Report, that the proposed second North-South Interconnector, connecting between the existing Woodland Substation in County Meath and the proposed new substation in Turleenan in County Tyrone, will reinforce the transmission network in the North-East area. It will achieve this by effectively bypassing the existing high capacity transmission circuits running between the Greater Dublin Area and the transmission network in Northern Ireland (via Louth Substation), thus freeing up spare capacity on these circuits in the short and medium terms for the supply of electricity to local consumers.

The manner in which the proposed interconnector will reinforce the north-east area is further expanded in section 4.1 of the Final Re-evaluation Report.

- 7. The Re-evaluation Report focuses on just two study areas Ecology and Landscape on which to make a value judgement as to the 'most preferred' or 'best fit' route corridor. However:
  - *i)* In terms of ecology, it is contended in the submission "that Route Option B clearly comes out as 'most preferred' or 'best fit'"; and
  - *ii)* In terms of landscape it is contended in the submission that "the landscape rating should be equal or neutral with regard to Route Corridors A and B".

**RESPONSE:** A qualitative assessment using professional judgement based on engineering, environmental and other criteria is considered a reasonable approach in undertaking a comparative analysis between different route corridor options. This approach is frequently used in undertaking such analysis in respect of other linear projects by other infrastructure providers (e.g., roads, rail and pipelines). Such an approach identifies the different route options as being "More or "Less Preferred" and "Least Preferred" – essentially referring to the extent of environmental and other constraints associated with each option. This type of analysis allows comparisons to be made across a range of competing criteria, so that the project that has the lowest overall environmental impact is selected above projects that create a higher level of environmental impact. In this regard, it is important to understand that the term "preferred" is a

generally accepted industry term for infrastructure route selection by which is meant the "least constrained" or "best-fit" option.

Throughout the Preliminary Re-evaluation Report, the consultants have justified, with reference to their professional judgement, the route corridor that constitutes "*the most appropriate balance between the various technical, environmental and other evaluation criteria*". In particular, they have considered the fact that while most potential impacts can be minimised by mitigation as part of the detailed design process, there will be some potentially significant impacts which cannot be entirely mitigated. In the Environmental Impact Assessment process these are referred to as residual impacts.

Whilst the corridor evaluation process had regard to a variety of different environmental and other criteria, there was found to be no significant difference in comparing route corridor options, for the purposes of the re-evaluation process, between a number of such criteria including water, geology settlements and infrastructure/utilities – hence no further consideration was given to them in the comparative evaluation. On the other hand, there was a discernible difference between the identified route corridor options in terms of ecology and visual impact which resulted in a greater focus on these criteria.

The Preliminary Re-evaluation Report concludes that, in ecological terms, Route Corridor Option B is more preferred than both Route Corridor Options A and C, but in relation to landscape, Route Corridor Option A is more preferred to Route Corridor Options B and C.

In balancing the ecological and landscape impacts against each other, in order to reach an overall conclusion, consideration needs to be given to the principles underlying environmental impact assessment.

The basic principles which underlie environmental assessment are impact avoidance, reduction and mitigation. In relation to an OHL, avoidance of visual impact in close proximity to the OHL is generally not possible but it is possible to reduce and mitigate visual impacts on the wider landscape by selecting a route corridor which creates the lowest level of visual impacts. In relation to ecology it is generally possible to avoid and reduce impacts by placing structures in particular locations which are less sensitive in ecological terms.

Having regard to the wider landscape setting within which route corridors should be considered, Route Corridor Option A and Route Corridor Option B have been identified as the route corridor options which reduce the visual impacts to the greatest extent possible, when compared to other route corridor options (notwithstanding the fact that all corridors create visual impacts). In conclusion, greater clarity has been provided within the Final Re-evaluation Report regarding the evaluation process and outcome; and in particular the reasons as to why ecology and landscape became the focus when evaluating corridors.

8. The submission concludes setting out *"Naturally, it goes without saying that whichever route emerges, it is contended that it is inappropriate and unsustainable development in the unique drumlin landscape through which it passes".* 

**RESPONSE:** The landscape of Co. Monaghan forms part of a drumlin belt which runs across the country from Strangford Lough in Co. Down to Donegal and Clew Bay in Mayo. While topography is a prime contributor to landscape character in Monaghan, this character is also formed by agricultural and settlement patterns, trees and hedgerows, and existing built features such as roads, walls, buildings, communications and electricity infrastructure. Most of the roads, and therefore most opportunities for viewing the proposal, follow the lower ground within the undulating landscape. As a result, most views are relatively short distance and are enclosed by the drumlin topography. The proposed development will not affect the underlying topography of the landscape to the same extent as would, for example, a major road

The drumlin landscape results in enclosed or open views depending on the elevation of the viewpoint. Therefore, drumlin topography can either elevate or conceal individual towers in the landscape. The dynamic and complex nature of undulating countryside provides fore, middle and distant ground to a vista that helps to provide realistic scale and visual containment not available in open country. Where towers are located on higher ground, there is potential for visibility over a wider area. The line design has therefore aimed to keep the development to a low as possible elevation for as much as possible of the route. The linear nature of the development, the need to keep direction change to a minimum, constraints in the natural environment and the avoidance of dwellings mean it is not always possible to follow the lowest part of the landscape and some towers will inevitably be located at higher elevations.

#### 2.4 SUBMISSION FS-3:

**Overview:** This submission raises concerns in respect of the health implications of overhead pylons. Other points include advising EirGrid of restricted access to lands because of the nature of the tillage cycle. The observer advises of unwillingness to deal with agents on behalf of EirGrid.

#### Key points of the submission:

1. EirGrid wishes to proceed with *"a health-threatening scheme of overhead pylons against the clear wishes of those whose land you wish to cross"*.

2. "..an antagonistic approach to landowners who wish to be cooperative".

"I am not prepared to deal with an unknown third party on any issue to do with your project or access to lands"; and

"I am sure landowners would be willing to be cooperative if there was evidence that EirGrid listened to and acted upon the concerns. There has been little evidence of that."

3. "Given the nature of the tillage cycle, this will mean that access to the property cannot be made in the growing season."

#### **RESPONSE TO KEY POINTS:**

1. EirGrid wishes to proceed with "a health-threatening scheme of overhead pylons against the clear wishes of those whose land you wish to cross".

**RESPONSE:** EirGrid acknowledges that health is a concern for affected individuals (including landowners) and the public. **Section 4** of this document sets out the manner in which EirGrid and the Project Team has/will respond to particular general issues raised (including health) as part of the progression towards a planning application.

2. "..an antagonistic approach to landowners who wish to be cooperative".

"I am not prepared to deal with an unknown third party on any issue to do with your project or access to lands"; and

"I am sure landowners would be willing to be cooperative if there was evidence that EirGrid listened to and acted upon the concerns. There has been little evidence of that."

**RESPONSE:** Subsequent to receiving this particular submission, EirGrid met with this landowner and resolved his concerns expressed in relation to dealing with EirGrid and its representatives.

EirGrid acknowledges landowner concerns in respect of the project's potential impact on specific landholdings, and it continues to pursue consensus in relation to the routeing of the line, and in particular the location of towers, by proactively engaging with landowners to try and mitigate any potential impact on current farming practices and other land uses, while trying to balance other competing priorities such as environmental constraints and distance to dwellings. This will be considered during the next stage of the project – Route Confirmation - in the context of ongoing

technical and environmental studies and stakeholder (in particular landowner engagement) consultation.

3. "Given the nature of the tillage cycle, this will mean that access to the property cannot be made in the growing season".

It should be noted that access to survey is not invasive and primarily involves walking the land. Through landowner site visits, EirGrid wishes to ascertain whether and how the proposed OHL might affect landowners, and how this might be best resolved to the greatest possible extent, for example agreeing tower positions with landowners where these are acceptable from a technical and environmental perspective.

#### 2.5 SUBMISSION FS-4:

**Overview:** This submission raises issues relating to opportunities for partial undergrounding along the route alignment and modifications to the route alignment. The submission considers that partial undergrounding would have the effect of significantly dealing with concerns in respect of *"environmental impacts on their house, lands and family*". It also identifies other potential modifications to the route alignment which would maximise the distance from the subject property.

#### Key points of the submission:

- 1. "The new proposal put forward by EirGrid shows no change at all in relation to the line".
- "Consideration of alternatives is ongoing ..... that it is possible to underground part of this line
  ...." and ".... that it is accepted that such an underground section could be of the order of 10
  kilometres".
- 3. "The concerns that we have raised relate to the visual impact, the impact of the line would have on health and noise, the impact on our farming practice and general nuisance attached to a line of this size and scale in such close proximity to our house". If the line was to go underground this would deal with these concerns".
- 4. "If the option of an underground route for the line is not acceptable, then any overground line should proceed through [other specified] lands at the maximum distance possible from our property and from our dwelling house in particular".

#### **RESPONSE TO KEY POINTS:**

1. "The new proposal put forward by EirGrid shows no change at all in relation to the line".

**RESPONSE:** As set out in FS-2 above (in response to point no.1), the Preliminary Reevaluation Report is considered to clearly document the rationale for decisions taken which has resulted in largely the same route with some localised modifications being identified. Given the extent of technical and environmental work that has occurred in respect of the proposed development over the last number of years, as well as the extent of public, landowner, and other consultation and engagement that has been undertaken in respect of the overall project, it is perhaps unsurprising that the previously proposed line route substantially comprises the indicative route as identified in the Preliminary Re-evaluation Report. The purpose of this reevaluation process is to ensure that there is an understanding of, and confidence in, EirGrid's conclusions, and that is why this process provides for significant public and stakeholder input as well as an opportunity to provide inputs and suggestions on the routing of the line.

However, it should be noted that the route identified in the Preliminary Re-evaluation Report (and in the Final Re-evaluation Report) comprises an indicative line route, and not the final designed or proposed route. The preferred line design will be detailed in a Preferred Project Solutions Report, which will be published in due course. There is still scope for landowners to influence the detailed route of the alignment.

Further potential localised modifications to the line route are matters which will be dealt with in consultation with the competent authorities, in discussions with landowners, and in reference to conclusions of ongoing studies. As part of the EIA process, and assuming appropriate and adequate access to lands, EirGrid will assess any suggested localised amendments to determine if there are any potential environmental impacts. Where these can be accommodated without creating additional environmental impacts they will be further considered. Where it is assessed that they would create additional avoidable significant environmental impacts it is unlikely that they will be capable of being further considered. All localised assessments will form part of the EIS.

Consideration of alternatives is ongoing ..... that it is possible to underground part of this line
 ..." and ".... that it is accepted that such an underground section could be of the order of 10
 kilometres".

**RESPONSE**: One of the findings of the Preliminary Re-evaluation Report is that a hybrid 400 kV UGC/OHL circuit may be feasible, but only:

• If the length of UGC to be installed is relatively short;

- Where the cost of using the short length of UGC can be proven to be an environmentally advantageous and cost effective way of overcoming an environmental or technical constraint to the preferred OHL; and
- Where it can be confirmed that the use of UGC does not exceed the transmission system's capacity to accommodate such cables.

On the basis of updated environmental constraints and other information, EirGrid and its consultants consider that at the strategic level of the re-evaluation process, no material implications would warrant the use of UGC along any part of the identified indicative line route, other than that identified section within the area of Woodland Substation. Reference is made to page 131 of the Preliminary Re-evaluation Report which sets out:

"At this stage in the process, EirGrid and its consultants are of the consideration that on the basis of the re-evaluation of updated environmental and other information, a viable and environmentally acceptable preliminary indicative line route for a 400 kV OHL exists."

EirGrid's findings in this matter, as set out in the Preliminary Re-evaluation Report, are addressed in the Final Re-evaluation Report in reference to the review of the International Expert Commission on the case for, and cost of, undergrounding all or part of the North-South Interconnector and the subsequent Government Policy Statement.

However, EirGrid acknowledges that there are landowner concerns in respect of the project's potential impact on specific landholdings. It will consider and assess all requests to modify the line route, in dialogue with directly affected landowners. This will include landholding-specific consideration of technical, environmental, cost and other criteria. This will be considered during the next stage of the project, rather than in this stage of strategic project re-evaluation, in the context of ongoing technical and environmental studies and consultation with competent authorities and landowners.

In conclusion therefore it remains EirGrid's position that there are no areas along the indicative line route that would warrant partial undergrounding (other than a short section within the confines of the existing Woodland Substation), including the section referenced in this submission. EirGrid will however investigate this option further as part of the consideration of alternatives to be addressed in the EIS which will accompany an application for planning approval for the North-South 400 kV Interconnection Development.

3. "The concerns that we have raised relate to the visual impact, the impact of the line would have on health and noise, the impact on our farming practice and general nuisance attached to a line of this size and scale in such close proximity to our house. If the line was to go underground this would deal with our concerns".

**RESPONSE:** Section 4 of this document sets out the manner in which EirGrid and the Project Team has/will respond to particular general issues raised (landscape, health, noise and agronomy) as part of the progression towards a planning application.

4. "If the option of an underground route for the line is not acceptable, then any overground line should proceed through [other specified] lands at the maximum distance possible from our property and from our dwelling house in particular".

**RESPONSE:** EirGrid's policy for dealing with a request such as this is that it will be accommodated as long as it is technically feasible; does not result in an additional environmental impact; and the receiving adjacent landowner consents to the route modification, in full knowledge of the reason for said modification. This particular request is being dealt with in accordance with this policy and EirGrid is working with the landowner in question with a view to finding an acceptable solution.

#### 2.6 SUBMISSION FS-5:

**Overview:** This submission by the National Roads Design Office notes that Route Corridor 3B in the Meath Study Area appears to cross the M3 Motorway near Grange. It notes that although this land is registered to Meath County Council, it contains the M3 Motorway which is run by EuroLink M3 under licence from the National Roads Authority (NRA). It requests that both EuroLink M3 and the NRA be consulted regarding any proposed works to be carried out on or over this land.

**RESPONSE:** EirGrid has and will continue to engage with EuroLink M3 and the NRA in developing the project, and preparation of the EIS, as well as prior to any proposed works being carried out on this land.

#### 2.7 SUBMISSION FS-6:

**Overview:** This submission is from a landowner and raises issues relating to route alignment and choice of transmission technology.

#### Key points of the submission:

- 1. Potential for an alternative route alignment; and
- 2. Outlines general support for an over head line option setting out "*I do not mind what route to take and object to underground because of cost and difficulty doing repairs*".

#### **RESPONSE TO KEY POINTS:**

1. Potential for an alternative route alignment.

**RESPONSE:** EirGrid acknowledges landowner issues in respect of the project's potential impact on specific landholdings. It has established a series of protocols to consider and assess requests for local modification of the line route in dialogue with directly affected landowners. This will include landholding specific consideration of technical, environmental, cost and other criteria. This will be considered during the next stage of the project – Route Confirmation - in the context of on-the-ground surveys, ongoing studies and consultation with competent authorities and the individual landowners.

As part of the EIA process, EirGrid will assess any suggested alternative localised amendments to determine the potential environmental impacts. Where these can be accommodated without creating additional environmental impacts they will be further considered. Where it is assessed that they would create additional avoidable significant environmental impacts it is unlikely that they will be capable of further consideration. All localised assessments will form part of the EIS.

2. Outlines general support for an over head line option setting out "*I do not mind what route to take and object to underground because of cost and difficulty doing repairs*".

EirGrid notes the landowner's objection to the use of an underground cable solution for this project. The reasons stated are consistent with EirGrid's position on this matter as set out in section 3.7 of the Preliminary Re-evaluation Report.

EirGrid's updated consideration of the technical alternatives, as set out in the Preliminary Reevaluation Report, are addressed in the Final Re-evaluation Report in reference to the review of the International Expert Commission on the case for, and cost of, undergrounding all or part of the North-South Interconnector and the Government Policy Statement.

In conclusion, Chapter 3 of the Final Re-evaluation Report addresses the findings of the review of the International Expert Commission and the subsequent Government Policy Statement.

#### 2.8 SUBMISSION FS-7:

**Overview:** This submission primarily raises issues relating to constraints and line route design.

#### Key points of the submission:

- 1. What is the definition of 'constraint' and 'sensitive receptor'?
- 2. Does EirGrid intend to apply the WHO guidelines regarding the minimum distance of 50 metres from residential properties along the entire length of the North-South Interconnector?
- 3. Why is our house and garden not regarded as a residential constraint?
- 4. Will the stringing of the free side of the existing Moneypoint to Woodland 400 kV line be included in the EIS"?

This submission also raises some site-specific queries which are not relevant to the re-evaluation process; these will be dealt with separately and directly with the individuals concerned.

#### **RESPONSE TO KEY POINTS:**

1. What is the definition of 'constraint' and 'sensitive receptor'?

**RESPONSE:** The terms 'constraint' and 'sensitive receptor' are common terms used in environmental impact assessment. However, in the interests of clarity an explanatory note is provided in the Final Re-evaluation Report in respect of these terms.

As a result explanatory text has been inserted into Chapter 5 of the Final Re-evaluation Report and the terms have been added to the Glossary of Terms, as follows: Receptor - any element of the environment which is subject to impacts

Constraint – any physical, environmental, topographical, socio-economic or other condition that may affect the location, development and other aspects of a proposal

Sensitivity – the potential of a receptor to be significantly changed.

Furthermore, the corridor evaluation process has been further described in the Final Reevaluation Report.

2. Does EirGrid intend to apply the WHO guidelines regarding the minimum distance of 50 metres from residential properties along the entire length of the North-South Interconnector?

**RESPONSE:** There are no World Health Organisation (WHO) guidelines which specify a minimum separation distance between high voltage overhead lines and residential properties. The WHO has however endorsed the guidelines produced by ICNIRP (International Commission on Non-Ionizing Radiation Protection).

Overhead transmission lines come in many shapes and sizes, with different voltage levels, different power carrying capacities and different configurations. The strength of an EMF emanating from a given overhead line is directly related to all of these variables. The ICNIRP guidelines recognise this fact and instead of specifying a minimum clearance distance the Guidelines specify 'Basic Restriction Levels' for the exposure of the general public to EMF. As the strength of the EMF is at its highest in the immediate vicinity of the live wire and decreases rapidly with growing distance from the overhead line a minimum clearance distance from an overhead line to a dwelling that satisfies the Guidelines can be derived for every type and size of overhead line.

The 1998 ICNIRP Guidelines have also been endorsed by the EU Commission and form the basis of EU Council Recommendation 1999/519/EC which describes the EU Guidelines. The Irish Government has adopted the EU Guidelines without variation. EirGrid designs and operates the Irish transmission network in accordance with the EU Guidelines. The North South 400 kV Interconnector will comply with the EU Guidelines and therefore it can be stated that it will comply with the derived minimum separation distance between existing dwellings and the live wires of the transmission line.

Additional information about electric and magnetic fields in Ireland can be found in "EMF and You", an EirGrid information brochure available from <u>www.eirgridprojects.com</u>.

3. Why is our house and garden not regarded as a residential constraint?

**RESPONSE:** Residential properties are always considered a constraint for the purpose of proposed new transmission projects (including new line routes, new substation sites and the expansion of existing transmission infrastructure).

In the Preliminary Re-evaluation Report, one of the most significant constraints for corridor identification comprised settlements and areas of population density (refer to Map 6 (MSA / CMSA)). In respect of the identification of the indicative line route, dwellings are considered as a significant constraint. In this particular project, the Preliminary Report acknowledges that the extensive dispersed rural settlement (i.e. dwellings and ribbon development) within the Study Area, creates a difficult constraint that affects the positioning of the transmission line within any route corridor. However, it is also acknowledged that appropriate mitigation measures will need to be incorporated into the detailed design in order to address this.

EirGrid acknowledges landowner concerns in respect of the project's potential impact on specific landholdings and it continues to pursue consensus in relation to the routing of the line, and in particular the location of towers, by proactively engaging with landowners to try and mitigate any potential impact on current farming practices and other land uses, while trying to balance other competing priorities such as technical necessity, environmental constraints, and proximity to dwellings. This is not a matter for this re-evaluation process, but rather will be considered in detail during the next stage of the project, in the context of ongoing technical and environmental studies, and in consultation and engagement with competent authorities and landowners.

As part of the detailed line design and EIA process, EirGrid will assess any suggested or identified alternative local modifications, to determine resulting potential environmental impacts. Where these can be accommodated without creating additional environmental impacts they will be further considered. Where it is assessed that they would create additional avoidable significant environmental impacts it is unlikely that they will be capable of further consideration. All localised assessments will form part of the EIS.

4. Will the stringing of the free side of the existing Moneypoint to Woodland 400 kV line be included in the EIS?

**RESPONSE**: Yes, the EIS to accompany the new application for planning approval will clearly assess the full extent of the proposed development, including the stringing of the free side of the existing Moneypoint to Woodland 400 kV line, should this form part of the preferred project solution.

#### 2.9 SUBMISSION FS-8:

**Overview:** This submission was made by the Executive of Monaghan County Council. It submits that its concerns remain broadly the same as those submitted to An Bord Pleanála in respect of the previous application for approval (both in writing and to the Oral Hearing). The specific point is:

"It is understood that the route of the line through County Monaghan remains broadly as submitted to An Bord Pleanála in your earlier application to them, as considered at the oral hearing. As such the concerns previously expressed by Monaghan County Council, both in its written report and provided orally at the hearing remain."

These issues / concerns raised during the previous application for approval are summarised below and include:

- 1. National, regional and county development plans support the proposal in principle;
- 2. There is limited information in the EIS to justify the interconnector being taken through County Monaghan;
- 3. EIS fails to take account of the Monaghan Landscape Character Assessment and the impact of the siting of the towers in the various Landscape Character Types and Areas;
- 4. EIS has failed to justify the positioning of towers in particular locations in the landscape and has not given due regard to policies ENV 2 and ENV 3 and the County Development Plan (CDP);
- 5. The photomontages should also take account of not only the proposed line but also the potential for the line to deviate 40 metres either side of the proposed line;
- 6. No Zone of Visual Influence (ZVI) Assessment was submitted;
- 7. The EIS has failed to properly assess the visual impact of the proposed development upon the views from the scenic routes designated in the Monaghan County Development Plan 2007 2013 and the settings of lakes and their environs and any mitigation measures have not been included;
- 8. The EIS has failed to assess the impact of the proposed development upon trees and hedgerows along its route (specifically the low level of clearance);

- 9. The EIS failed to properly assess the impact of the proposed development upon biodiversity in the vicinity and mitigation measures have not been included. It is apparent from the lack of detail provided that no botanical surveys were undertaken;
- *10.* Contour / topographical maps showing each tower location, its elevation and its relationship to surrounding area should be submitted;
- *11.* Some of the details regarding status of sites has been incorrectly transcribed from the CDP to give a lower importance to sites;
- 12. Although the proposed development passes in proximity to a number of protected structures and historic gardens, it is considered that it will have limited impact upon the integrity or setting of these structures. A Zone of Visual Influence Assessment included with the EIS would be seminal in making a full assessment;
- *13.* In order to determine the nature and scale of impacts on known archaeology, a photographic analysis of these visual impacts should be provided;
- 14. The EIS has failed to adequately assess the impact of the development as proposed and also with regard to micrositing of the proposed development upon existing and permitted development;
- *15.* The EIS has inadequate detail in relation to routes used by construction traffic, facilitating works to allow construction and traffic access, traffic management and reinstatement works;
- *16.* Landscape and the natural environment are important in respect of tourism. The EIS has failed to properly take into account the impact of the proposed development on tourism; and
- 17. Inadequate consideration has been given of the impact of the construction of the line anywhere within the corridor, particularly as a deviation of 40 metres in any direction could represent a significant change in both base level and height of the towers.

#### **RESPONSE TO KEY POINTS:**

1. National, regional and county development plans support the proposal in principle.

**RESPONSE:** The comments that national, regional and county development plan policies support the proposal in principle are noted and welcomed.

## 2. There is limited information in the EIS to justify the interconnector being taken through County Monaghan.

**RESPONSE:** Chapter 4 of the Preliminary Re-evaluation Report sets out the re-evaluation of the points of connection of the new North-South Interconnector to the existing transmission system and the background to the identification of the defined study area, which includes County Monaghan. The reasons for routing the proposed line through County Monaghan are clearly set out, along with alternative locations that were considered.

The identified preferred route corridor (approximately 1 km wide) and indicative line route within that corridor identified in the Preliminary Re-evaluation Report remains substantially as per the previous proposal. In reaching this conclusion, the re-evaluation process has not identified any issue which would require significant modification to that previously proposed alignment within County Monaghan. However, the overall re-evaluation process, including public and stakeholder consultation, is intended to identify any issues that might have been overlooked in the Preliminary Re-evaluation Report, and which would justify such modification of the alignment. In addition, the overall re-evaluation process will conclude with the identification of an indicative line route; this will be subject to detailed line design confirmation and environmental assessment, in dialogue with directly affected landowners and other stakeholders, which are likely to result in local modifications to the alignment in the final proposal.

In conclusion, Chapter 4 of the Final Re-evaluation Report has been reviewed; re-organised and additional graphics are now included in order to clarify the reasons why the interconnector passes through County Monaghan, as well as through the other counties.

#### 3. Points 3 - 17 (as identified above)

**RESPONSE:** These points detail specific aspects of the EIS and suggest that the EIS has failed to adequately assess various aspects of the proposed development in areas such as landscape, ecology, cultural heritage, micrositing and tower location, construction traffic and tourism.

All these comments are noted; it is considered that these are not matters for this re-evaluation process, but rather relate to the preparation of the proposed application for planning approval and the accompanying EIS. It is acknowledged that, in response to the feedback from Monaghan County Council, there may be a need for greater clarity in the particulars of the forthcoming application. This will be taken into consideration during the next stages of project development and application preparation, including the preparation of the EIS; EirGrid will seek to discuss such matters with the Executive of Monaghan County Council - in particular the presentation of EIS material will be discussed to ensure it is clear where and how all matters raised by Monaghan County Council are addressed.

#### 2.10 SUBMISSION FS-9:

**Overview:** This submission by NEPP sets out summary feedback in respect of the Preliminary Reevaluation Report.

#### Key points of the submission:

- 1. "...refusal by EirGrid to objectively examine all practical and feasible options for implementing this Project, especially the publically acceptable option of undergrounding the transmission lines".
- 2. "... failure by EirGrid to professionally address the inadequacies and deficiencies highlighted during the Oral Hearing in 2010. Specifically, the following issues have not been addressed, accepted or solved:
  - *i.* Project Splitting that Woodland's impacts and the cumulative impacts of the East-West and North-South interconnector Developments, have not been assessed.
  - ii. Substation siting
  - iii. Agriculture and farming impacts
  - iv. Landowner / house owner property devaluation impact
  - v. Landscape and Visual Amenity Issues
  - vi. Alternative technologies
  - vii. Public consultation
  - viii. Health and Safety concerns
  - ix. Noise Pollution Controls
- 3. "NEPPC notes the aggressive behaviour and misleading information being meted out to landowners on foot of this report".

#### **RESPONSE TO KEY POINTS:**

1. "...refusal by EirGrid to objectively examine all practical and feasible options for implementing this Project, especially the publically acceptable option of undergrounding the transmission lines".

**RESPONSE**: While an underground alternative may be the preference of many of the stakeholders who have engaged on the project to date; EirGrid has to be guided by its technical expertise and experience in this matter. Refer to **Section 2.2**, FS-1 – point no. 1 which sets out EirGrid's full response to this.

In conclusion, in Chapter 3 the Final Re-evaluation Report addresses the findings of the review of the International Expert Commission in respect of the Meath-Tyrone 400 kV Interconnection Development and the subsequent Government Policy Statement.

2. "... failure by EirGrid to professionally address the inadequacies and deficiencies highlighted during the Oral Hearing in 2010.

EirGrid does not accept the contention that alleged '*inadequacies and deficiencies*' raised by the observer at the oral hearing in 2010 were not adequately addressed. The issues raised by the observer were addressed at that hearing by EirGrid. The specific issues raised in this latest submission are addressed below.

2(i) Project Splitting – that Woodland's impacts and the cumulative impacts of the East-West and North-South interconnector Developments, have not been assessed.

As noted previously in **Section 2.3** (in response to FS-2, point no. 3) it is important that the full extent of any project is properly identified and assessed. The term 'project splitting' refers to a project being artificially broken up into a series of separate projects (and planning applications) to avoid triggering a requirement for environmental impact assessment, in particular.

EirGrid is undertaking a detailed environmental assessment to support the new application for planning approval for the North-South 400 kV Interconnection Development (to include works to the Woodland Substation); EirGrid also undertook environmental assessment to support the application for the East-West Interconnector (including works to the Woodland Substation). Accordingly, concerns relating to 'project splitting' are not considered relevant as the applications have been / will be accompanied by environmental assessment, which will include analysis of any and all cumulative impacts associated with the proposed North-South Interconnection Development.

#### 2(ii) Issue - Substation siting

**RESPONSE:** As set out in Chapter 4 of the Preliminary Re-evaluation Report, EirGrid is now of the opinion that an intermediate substation in the vicinity of Kingscourt (not necessarily at Moyhill) is not now expected to be required within the next 10 years; and it is therefore not considered necessary or appropriate to include it in the new application for the proposed North-South 400 kV Interconnection Development.

However, given the possibility of this substation being proposed at some point in the future and the possibility that it may be in the vicinity of Kingscourt (but not necessarily at Moyhill) it is considered reasonable that an environmental impact assessment of the potential impacts arising from the possible future development of the intermediate substation should be included in the EIS as part of the consideration of potential impacts on the environment, including cumulative impacts, for the North-South Interconnection Development.

(2)(iii) – (ix) Issues as detailed above.

**RESPONSE:** These are matters which are not considered to be within the scope of this Reevaluation process, but which are more pertinent to the project development process, including preparation of an EIS and the process of environmental impact assessment. In developing its proposal, EirGrid and its consultants will consider the proposed development in respect of all these environmental issues. **Section 4** of this document sets out the manner in which EirGrid and the Project Team has/will respond to particular general issues raised (including agronomy, landscape and health) as part of the progression towards a planning application.

**3.** "NEPPC notes the aggressive behaviour and misleading information being meted out to landowners on foot of this report ......especially in relation to the statements by EirGrid and/or its agents related to pylon compensation costs and ESB/IFA code of practice."

**RESPONSE:** On foot of this feedback EirGrid has conducted a full internal audit of all its communications and landowner engagement activity, and is satisfied, in the absence of any details of an alleged incident, that no aggressive behaviour towards landowners by EirGrid or its agents has occurred.

In the event that a proposed transmission development receives planning approval and proceeds to construction any losses incurred by the landowner of lands on which the line is constructed will be compensated by means of a statutory compensation process. A landowner who is dissatisfied with the amount of compensation offered has the statutory right to have the compensation amount assessed by an independent arbitrator.

The 'ESB/IFA Code of Practice for Survey, Construction & Maintenance of Overhead Lines in Relation to the Rights of Landowners' is a publically available document. During engagement with landowners the existence of the ESB/IFA Code of Practice is brought to the attention of landowners by EirGrid and/or its agents. If the landowner requests a copy of the document one is provided.

#### 2.11 SUBMISSION FS-10:

**Overview:** Submission by Sinn Fein, representing those communities in counties Meath, Cavan and Monaghan who "are deeply concerned at the restated intent of EirGrid to force a 400 kV Interconnector across their lands and in close proximity to their homes, schools and places of work".

#### Key points of the submission:

- 1. EirGrid is "going through the motions" embarking on "this further so called public consultation exercise given the extent of communication of their total opposition to the pylon supported overhead powerline plans of EirGrid and NIE by individuals, families, groups and whole communities along the entire length of the proposed route...".
- 2. Having regard to all engagements, objections, submissions and presentations to the Oral Hearing (in respect of the previous application) that it is clear that "*communities will only give their support to the interconnector if it is proceeded with by way of underground cabling*".
- "What plans have the Company to compensate the many individuals and community groups left significantly out of pocket for their efforts to inform the process" as a result of the collapse of the 2010 Oral Hearing; and
- 4. Other considerations framing the opposition to the overhead option include health, the environment, agriculture, homes, communities and tourism considerations.

#### **RESPONSE TO KEY POINTS:**

1. EirGrid is "going through the motions" embarking on "this further so called public consultation exercise given the extent of communication of their total opposition to the pylon supported overhead powerline plans of EirGrid and NIE by individuals, families, groups and whole communities along the entire length of the proposed route...".

**RESPONSE:** EirGrid has been consulting and engaging on this project for the last number of years, and inputs from the public and other stakeholders have formed an important element of the project development to date. The Preliminary Re-evaluation Report is very clear as to how

and why decisions have been made and endorsed in shaping the proposed development. The suggestion that EirGrid is *"going through the motions"* is incorrect. Specific reference is made to the following:

- The process of public and stakeholder consultation is intended to provide stakeholders with an opportunity to provide their feedback on the content and findings of the Preliminary Re-evaluation Report and to identify any additional issues or insights that should be considered as part of the re-evaluation process which would justify a modification to the overall planned project, or indicative route alignment; and
- EirGrid continues to pursue consensus in relation to the routing of the line, and in particular the specific location of towers, by proactively engaging with landowners to try and mitigate any potential impact on current farming practices and other land uses, while trying to balance other competing priorities such as environmental constraints and distance to dwellings.

It is the case that, due to the technical nature of a project, or competing environmental priorities, it may not always be possible to accommodate suggestions by stakeholders regarding the nature and routing of a transmission line. In this instance, the indicative route identified by EirGrid in the Preliminary Re-evaluation Report (and as now presented in the Final Re-evaluation Report), is considered to ensure the most appropriate balance between often competing technical, environmental, community and other criteria.

2. Having regard to all engagements, objections, submissions and presentations to the Oral Hearing (in respect of the previous application) that it is clear that "communities will only give their support to the interconnector if it is proceeded with by way of underground cabling".

**RESPONSE:** While an underground alternative may be the preference of many of the stakeholders who have engaged on the project to date; EirGrid has to be guided by its technical expertise and experience in this matter. EirGrid's full response to this issue is set out in **Section 2.2** of this Report, in response to FS-1, point no.1.

In conclusion, Chapter 3 of the Final Re-evaluation Report addresses this issue in the context of addressing the findings of the **review of the International Expert Commission and the subsequent Irish** Government Policy Statement.

3. "What plans have the Company to compensate the many individuals and community groups left significantly out of pocket for their efforts to inform the process" as a result of the collapse of the last Oral Hearing".

**RESPONSE:** The issue of compensation is not considered to comprise a matter for the reevaluation process in respect of the North-South 400 kV Interconnection Development project.

4. Other considerations framing the opposition to the overhead option include health, the environment, agriculture, homes, communities and tourism considerations.

**RESPONSE: Section 4** of this document sets out the manner in which EirGrid and the Project Team has/will respond to particular general issues raised (including health, environmental, agronomy, property, community and tourism related issues) as part of the progression towards a planning application.

#### 2.12 SUBMISSION FS-11:

**Overview:** This submission by Monaghan Anti-Pylon Committee considers that the Preliminary Reevaluation Report makes no new findings, new issues or new insights. It considers that previous submissions to An Bord Pleanála, including at the Oral Hearing, by and on behalf of Monaghan Anti-Pylon Committee, community groups, landowners and individuals from County Monaghan are still valid.

#### Key points of the submission:

- 1. "The Anti-Pylon Committee have duly considered the Re-Evaluation Report and note that there are no new findings, new issues or new insights arising in the report".
- 2. "... we feel that all previous written submissions to An Bord Pleanála and oral hearing evidence given at the Oral Hearing by and on behalf of the Committee, community groups, landowners and individuals, from County Monaghan are still valid".

#### **RESPONSE TO KEY POINTS:**

1. "The Anti-Pylon Committee have duly considered the Re-Evaluation Report and note that there are no new findings, new issues or new insights arising in the report".

**RESPONSE**: The Preliminary Re-evaluation Report is considered to clearly document the rationale for decisions taken which have resulted in largely the same route with some localised modifications being identified. Refer to **Section 2.3**, FS-2 - Point no. 1 and **Section 2.5**, FS-4 – Point no. 1 which provides EirGrid's full response to this issue.

2. "... we feel that all previous written submissions to An Bord Pleanála and oral hearing evidence given at the Oral Hearing by and on behalf of the Committee, community groups, landowners and individuals, from County Monaghan are still valid".

**RESPONSE:** EirGrid agrees that it is still valid to consider the submissions made to the Board in respect of the previous application for planning approval. As previously noted (also in **Section 2.3** in response to FS-2 – Point no.1) concerns and issues have been taken on board by EirGrid and its consultants arising from the Oral Hearing, and indeed the overall application in respect of the previous proposal.

#### 2.13 SUBMISSION FS-12:

**Overview:** This submission by AMP/SAFE queries the authority of EirGrid to transmit electricity over private property. The key point to the submission is that *"It would appear that EirGrid do not have authority to transmit electricity over private property".* 

**RESPONSE:** EirGrid is the licensed Transmission System Operator (TSO) for Ireland pursuant to Section 14 of the Electricity Regulation Act 1999. Pursuant to Regulation 8(1)(a) the TSO has power to operate and ensure the maintenance of and, if necessary, develop a safe, secure, reliable, economical and efficient electricity transmission system.

#### 2.14 SUBMISSION FS-13:

**Overview:** This submission seeks clarification of the information and facts that should be made available to both the public and impacted landowners.

#### Key points of the submission:

- 1. "Clarification in writing is required on the route selection methods employed by EirGrid in selecting the route section from Derryhallagh to Lemgare. The normal expectation would be that the shortest distance between two points is a straight line, however, in this instance there is a substantial kink or elbow formation which is out of context with the overall Northerly direction of the line. This kink has added in excess of 2.5 km to the length of the route requiring approximately seven more towers."
- Page 10 of EirGrid's Preliminary Re-evaluation Report sets out 'the route of the Interconnection Development shall be the shortest route that is technically and environmentally appropriate.'
   *"The route passes over Cashel Bog, close to Tassan Lough NHA and Lemgare Rocks NHA".*

- 3. "I disagree with the assertion that the height in Lemgare is lower than Crossmore".
- 4. "It is important to ensure full disclosure of all information and facts to both the public and landowners on why the line is going through their particular neighbourhood".

#### **RESPONSE TO KEY POINTS:**

1 "Clarification in writing is required on the route selection methods employed by EirGrid in selecting the route section from Derryhallagh to Lemgare. The normal expectation would be that the shortest distance between two points is a straight line, however, in this instance there is a substantial kink or elbow formation which is out of context with the overall Northerly direction of the line. This kink has added in excess of 2.5 km to the length of the route requiring approximately seven more towers."

**RESPONSE**: The route selection process in this area has had specific regard to balancing competing environmental and technical factors. Generally, in routing overhead lines, the key considerations are as follows:

- Distance to densely populated places;
- Visual impact;
- Protected or restricted ecological areas;
- Environmental impact;
- Technical standards;
- Topography;
- Cultural heritage;
- Road access;
- Geology and soils;
- Crossing with existing infrastructure; and
- Land use.

In terms of line routing, it is always an objective to achieve a relatively straight line between two defined connection points, taking into consideration environmental constraints and achieving the necessary technical standards. However, as a result of having to balance all the competing factors, OHLs often have to deviate from a straight line.

In this particular instance, the routing of the OHL in the area referred to in the submission is primarily designed to avoid the site identified as being the focal point of the Battle of Clontibret

(i.e. the area around where the monument/amenity area in Clontibret is situated). Whilst the battle site area is not defined in the County Development Plan or in historical publications, there is an amenity area at the crossroads west of Clontibret which provides a monument to the battle site and identifies this area as part of the site. The consequence of avoiding this historic site and associated public amenity area (which is considered an appropriate form of mitigation from an amenity and cultural heritage perspective) is the requirement for additional towers and a longer distance (i.e., the 'kink' rather than a straight line at this area of the route).

In terms of minimising potential impacts, in particular those associated with cultural heritage, the route section from Derryhallagh to Lemgare achieves this.

2. Page 10 of EirGrid's Preliminary Re-evaluation Report sets out "The route of the Interconnection Development shall be the shortest route that is technically and environmentally appropriate. The route passes over Cashel Bog, close to Tassan Lough NHA and Lemgare Rocks NHA".

**RESPONSE:** The key considerations when selecting an overhead line route are set out previously in point 1. Having regard to the balancing of all of the competing considerations, it is considered that the shortest route that is technically and environmentally appropriate is identified in the Preliminary Re-evaluation Report.

The specific locations referred to above are being considered in relation to the routing of the line, and in particular the location of towers, during the next stage of the project, and in the context of on-going technical and environmental studies.

#### 3. "I disagree with the assertion that the height in Lemgare is lower than Crossmore".

**RESPONSE**: When considered in the wider landscape context, the topography in the Lemgare and Crossmore areas appears to be similar in terms of elevation; however there are subtle differences when considered in a localised context and having regard to the routing criteria detailed in point 1 above.

Routing the OHL through Lemgare rather than Crossmore takes advantage of an area of lower ground along the Northern Ireland border between the townland of Lemgare and Coolartagh, thereby reducing visibility against the skyline. Having regard to the routing criteria detailed in point 1, if the OHL is routed through Crossmore it would be necessary to traverse an area of higher ground for a longer distance, thereby increasing its visibility against the skyline.

In summary, the route section from Derryhallagh to Lemgare is considered to minimise potential visual impacts by taking advantage of lower localised topography.

4. *"It is important to ensure full disclosure of all information and facts to both the public and landowners on why the line is going through their particular neighbourhood"* 

**RESPONSE:** EirGrid agrees. Indeed, the purpose of this re-evaluation process is to ensure that there is an understanding of, and confidence in, EirGrid's conclusions, and that is why this process provides for significant public and stakeholder input as well as an opportunity to provide inputs and suggestions on the routing of the line.

#### 2.15 SUBMISSION FS-14:

**Overview:** This submission considers that EirGrid still have not gone far enough on the option to underground the proposal. It also raises concerns about a potential health hazard associated with overhead lines.

#### Key points of the submission:

- 1. "We welcome that EirGrid have considered the public's opinion in this matter, they still have not gone far enough on the underground option".
- 2. "Living 80 metres from proposed overhead line would be a major health hazard...".

The submission concludes "We are not against progress, but we will continue to support NEPP, on the underground option".

#### **RESPONSE TO KEY POINTS:**

1. "Living 80 metres from proposed overhead line would be a major health hazard as results of all studies done by NEPP show".

**RESPONSE:** EirGrid acknowledges the concerns that residents, living in proximity to the proposed overhead line, may have regarding the perception of negative health effects arising from human exposure to EMF. EirGrid's expert advice is that the 'studies' in question refer to a number of epidemiological studies that showed a weak link between certain cancers and EMF. The significance of these studies must however be understood in their proper context. Epidemiological studies with such weak statistical associations do not by their very nature provide proof of a real risk. All they can do is provide scientists with guidance on where they should direct their research.

Based on the findings of these epidemiological studies, extensive scientific research has been, and continues to be, carried out across the world in laboratories and in controlled experiments on live animals. Authoritative bodies such as the World Health Organisation, ICNIRP (International Commission on Non-Ionizing Radiation Protection) and the European Commission have reviewed the findings of this body of research and concluded that a link between the levels of EMF that would typically be emitted by an electricity transmission installation and negative health effects in humans and animals has not been established.

In addition the research has not been able to provide a biological explanation or identify a mechanism for how exposure to these low levels of EMF could cause damage to a living cell. Based on an analysis of this body of research the Chief Scientific Adviser to the Irish Government in his position paper "A Review of Recent Investigations into the Possible Health Effects of Exposure to Electromagnetic Fields (EMF) from Power Lines" (July 2010) concluded that it "is simply not possible for the level of energies associated with power lines to cause cancer".

EirGrid designs and operates the transmission network in accordance with all relevant health and safety guidelines. Based on all of the foregoing EirGrid can state with confidence that EMF from the proposed overhead line will not pose a health risk to the residents of existing dwellings in its proximity or to the wider community.

Further elaboration on this issue can be found at Section 3.5 of this document and **Section 4** of this document sets out the manner in which EirGrid and the Project Team has/will respond to particular general issues raised (including health) as part of the progression towards a planning application.

Additional information about electric and magnetic fields in Ireland can be found in "EMF and You", an EirGrid information brochure available from <u>www.eirgridprojects.com</u>.

2. "We welcome that EirGrid have considered the public's opinion in this matter, they still have not gone far enough on the underground option"

**RESPONSE:** Refer to **Section 2.2** and the response to FS-1 - Point no. 1 which addresses EirGrid's response to the underground alternative.

In conclusion, Chapter 3 of the Final Re-evaluation Report addresses this issue in the context of addressing the findings of the review of the International Expert Commission.

#### 2.16 SUBMISSION FS-15:

**Overview:** This submission seeks clarity on the relationship between the proposed Interconnection Development, and the Government's strategic transmission infrastructure plans and wind development proposals and how they connect to the grid.

#### Key points of the submission:

1. "... the interconnector is only part of Government plans which also include plans to install a total of 5,000 kilometres of cabling and 6,000 Mega watts of wind farms. Therefore the interconnector's stated purpose is to interlink Northern Ireland's electricity grid with that of the Republic's".

"Without knowing the stated aims and total plans I will be unable to make meaningful submissions to the interconnector planning application".

- 2. "I would like to know how the construction of the interconnector will impact on the wind development with regard to power lines from these wind farms to the point of connection to the grid. The planning application [for the windfarm] does not explain how the said windfarm [Corrinshigo/Raragh] will be connected to the Grid system or the direction that wind will take".
- 3. The submission concludes "I would ask that you engage with me on this and provide all relevant information. Aarhus convention refers".

#### **RESPONSE TO KEY POINTS:**

1. "... the interconnector is only part of Government plans which also include plans to install a total of 5,000 kilometres of cabling and 6,000 Mega watts of wind farms. Therefore the interconnector's stated purpose is to interlink Northern Ireland's electricity grid with that of the Republic's".

"Without knowing the stated aims and total plans I will be unable to make meaningful submissions to the interconnector planning application".

**RESPONSE:** Chapter 2 of the Preliminary Re-evaluation Report records National policy that an additional high capacity electricity interconnector be established between the Republic of Ireland and Northern Ireland. This policy is specifically referenced in a number of policy documents as set out in the Report. The future application for approval of the proposed North-South 400 kV Interconnection Development will include a consideration of the relevant policy context for the development.

2. *"I would like to know how the construction of the interconnector will impact on the wind development with regard to power lines from these wind farms to the point of connection to the grid. The planning application* [for the windfarm] *does not explain how the said windfarm* [Corrinshigo/Raragh] *will be connected to the Grid system or the direction that wind will take"* 

**RESPONSE:** The Interconnection Development provides for the strategic transmission exchange of power flows over a large area of the island, and this will support the development of renewable power generation, primarily by providing increased capacity for transmission of renewable generation onto the grid. Wind farms primarily connect into the grid network at substation nodes – either existing or proposed. This occurs by way of connection agreements between EirGrid and the developer, which are outside the scope of this proposed development. The specific connection requirements for the Corrinshigo/Raragh windfarm will be to the distribution system and not the transmission system. Therefore EirGrid has no involvement and details of its connection are a matter for ESB Networks. It is also not of relevance for the North-South Interconnector. There are no windfarms directly to the proposed new North-South Interconnector.

3. "I would ask that you engage with me on this and provide all relevant information. Aarhus convention refers".

**RESPONSE:** All interested parties were invited, and continue to be invited, to participate in the consultation processes associated with this proposed Development. EirGrid is always willing to facilitate any engagement with the general public, landowners and all other stakeholders in respect of this, and all its projects, and will certainly accede to the request in this submission for continued engagement in respect of the proposed development.

The Aarhus Convention requires that the "public concerned shall be informed, either by public notice or individually as appropriate, early in an environmental decision-making procedure, and in an adequate, timely and effective manner..." and "The public participation procedures shall include reasonable time-frames for the different phases, allowing sufficient time for informing the public in accordance with paragraph 2 (The opportunities for the public to participate) above and for the public to prepare and participate effectively during the environmental decision-making."

Since the public launch of the project in October 2007, a lo-call phone line, email service, and postal service has been available to answer any questions or discuss concerns with the members of the public. This allows for optimum public participation, as addressed under the Convention. Moreover, there has been a statutory consultation process held in respect of the first application for approval and a subsequent consultation process in relation to the Preliminary Re-evaluation Report.

Furthermore there will be additional consultation opportunities in advance of the submission of the application for statutory approval to An Bord Pleanála.

#### 2.17 SUBMISSION FS-16:

**Overview:** This submission by the Doohamlet District Community Development Association concludes that no changes are proposed to the route alignment that would address the concerns raised by the Association previously during the 2009/2010 application for approval (both written and oral). It also raises concerns in relation to the methodology for corridor evaluation used in the re-evaluation process.

#### Key points of the submission:

- 1. "The Re-evaluation Report does not allay any fears members of our community have in terms of the health implications, visual impact, impact on sustainable development and tourism development in our area, devaluation of property, the environmental impact, and impact on traffic and road safety in our locality".
- 2. "We note that further ecological studies have confirmed the importance of our locality for whooper swans and ..... yet the re-evaluation report gives no details as to how this species will be protected from the proposed development".

"... we believe that mitigation will include bird flight diverters which will be fitted to the power lines and will make the powerlines more intrusive in our landscape. We believe details of these measures should be included in any proposals to allow local people to make an informed decision in relation to the impact of the proposed development on our area".

- 3. "The fact that there are existing OH cables in the area does not justify the installation of new overhead cables".
- 4. "...although views in our area are not identified in the County Development Plan, it is not then appropriate or justified to run overhead cables through that landscape, particularly along the elevated sections of the landscape where pylons are proposed on top of drumlins".
- 5. "Para 7.3.2 [of the Re-evaluation Report] comparatively assesses route options with respect to impact on landscape. It states "Route Corridor Option A is the second longest route. It will have least visibility as it is located on less elevated underlying topography than Route Corridor Option B". We struggle to understand the meaning of this statement, as while the "underlying" topography of Option A may be lower lying, there are locations where the proposed pylons are greatly elevated, particularly along the proposed route west of our village".

"Further clarification and illustrated analysis is required in relation to the comparative route assessment and the selection of the preferred route in terms of landscape impacts".

"The DDCDA completely disagrees with an approach "based on professional experience and expertise" and without any quantitative or weighting system to route comparison, as there is no transparency to allow thirds parties review the final decision. Furthermore, it is not practical to consider all criteria examined as having the same importance, as some elements result in temporary impacts during the construction and reinstatement process, while others result in permanent and ongoing impacts which will not be mitigated against".

"We do not believe the comparative corridor evaluation is a robust or detailed enough analysis of all the issues and we [do] not believe the stated preferred route in [is] conclusively the preferred route".

6. It is submitted that "the Doohamlet District Community Development Association does not believe that EirGrid has illustrated that the proposed development is warranted in passing through our area and will not be detrimental to our area. We remain opposed to the proposed development of a 400 kV Interconnector through our locality".

#### **RESPONSE TO KEY POINTS:**

1. "The Re-evaluation Report does not allay any fears members of our community have in terms of the health implications, visual impact, impact on sustainable development and tourism development in our area, devaluation of property, the environmental impact, and impact on traffic and road safety in our locality".

**RESPONSE:** Section 4 of this document sets out the manner in which EirGrid and the Project Team has/will respond to particular general issues raised (including health, landscape and material assets (e.g., property)) as part of the progression towards a planning application.

2. "We note that further ecological studies have confirmed the importance of our locality for whooper swans and ..... yet the re-evaluation report gives no details as to how this species will be protected from the proposed development".

"... we believe that mitigation will include bird flight diverters which will be fitted to the power lines and will make the powerlines more intrusive in our landscape. We believe details of these measures should be included in any proposals to allow local people to make an informed decision in relation to the impact of the proposed development on our area". **RESPONSE:** The comments about further ecology studies and assertions that bird flight diverters may be fitted to the overhead line are also noted and will be taken into consideration during the preparation of the EIS that will accompany a future application for approval.

Where mitigation measures such as bird diverters are required, these will be developed in consultation with the National Parks and Wildlife Service (NPWS). Visual and any other impacts arising from bird flight diverters will be assessed in the EIS, thereby informing local people of the potential impacts.

3. "The fact that there are existing OH cables in the area does not justify the installation of new overhead cables".

**RESPONSE:** The Preliminary Re-evaluation Report's reference to the extent of existing OHL in the area was not intended as a justification for the installation of new lines; rather it is a statement of fact regarding the characteristics of the receiving environment within which the project will be located – new transmission infrastructure development must be considered in the context of the extent of existing transmission infrastructure, and other development, in an area.

4. "...although views in our area are not identified in the County Development Plan, it is not then appropriate or justified to run overhead cables through that landscape, particularly along the elevated sections of the landscape where pylons are proposed on top of drumlins"

and

5. "Para 7.3.2 [of the Re-evaluation Report] comparatively assesses route options with respect to impact on landscape. It states "Route Corridor Option A – is the second longest route. It will have least visibility as it is located on less elevated underlying topography than Route Corridor Option B". We struggle to understand the meaning of this statement, as while the "underlying" topography of Option A may be lower lying, there are locations where the proposed pylons are greatly elevated, particularly along the proposed route west of our village".

"Further clarification and illustrated analysis is required in relation to the comparative route assessment and the selection of the preferred route in terms of landscape impacts".

"The DDCDA completely disagrees with an approach "based on professional experience and expertise" and without any quantitative or weighting system to route comparison, as there is no transparency to allow thirds parties review the final decision. Furthermore, it is not practical to consider all criteria examined as having the same importance, as some elements result in temporary impacts during the construction and reinstatement process, while others result in permanent and ongoing impacts which will not be mitigated against".

"We do not believe the comparative corridor evaluation is a robust or detailed enough analysis of all the issues and we [do] not believe the stated preferred route in [is] conclusively the preferred route".

**RESPONSE:** Line routing requires consideration of often competing constraints. In considering routing options around the Doohamlet area the following competing constraints were identified:

- A requirement to avoid the high ground in Cornahoe and Carrickinare;
- A requirement to avoid Ballintra church and Lough Major;
- requirement to avoid Cremartin Village;
- A requirement to avoid Doohamlet Village;
- A need to optimize length of line straights (i.e. straight sections of the line);
- A need to minimise the number of road crossings; and
- Finding the optimal crossing point of the existing Lisdrum Louth 110 kV line.

In addition, it is noted that siting the line route in alternative locations in the area would raise other issues, for example:

- Siting the line route further west of Doohamlet would bring it closer to Ballintra Church and to Lough Major, as well as resulting in additional road crossings;
- Siting the line route in the area to the east of Doohmamlet would bring it closer to both Castleblayney and Muckno Lake; and
- Siting the line to avoid drumlins would introduce a considerable number of additional angle structures in the area (hence the line route crosses a more limited number of drumlins e.g., Terrygreehan and Cornaure).

Having regard to the views expressed in the submission, the following clarifies the meaning of the statements in the Preliminary Re-evaluation Report:

- The topography must be considered in conjunction with the potential for impacting on sensitive receptors which are detailed above.
- Whilst the submission outlines specific elevated areas in the vicinity of Doohamlet village and states that the OHL will traverse these areas, it should be noted that these areas are considered to be less visually sensitive when compared to those areas which are designated in the County Development Plan (CDP).
- The CDP sets out what a Planning Authority considers to be its most significant visually sensitive areas at a County level. Views not included in the County Development Plan are thereby not afforded any special or protected status. However, while the locations referred

to in the submission were not included as a specific constraint in the Preliminary Reevaluation Report, as they are not identified for protection in the CDP, the analysis of constraints for this project did incorporate a wider assessment of the landscape, and resulted in the most sensitive identified sensitive landscapes being avoided at corridor development and selection stages.

• The objective of OHL routing is to minimise visual impacts on those areas which are designated (i.e. considered by the CDP to be the most sensitive landscape areas) and Route Corridor A achieves this.

In light of the above, the identified indicative line route alignment is considered to comprise the most appropriate indicative alignment for the North-South 400 kV Interconnection Development. The subsequent process of route confirmation, including tower siting will be presented in a Preferred Project Solution Report, which will be published in due course, and will be the subject of a separate round of public consultation and engagement, in particular including landowner engagement.

In relation to the DDCDA disagreeing with the approach based on *"professional experience and expertise"* this has been previously addressed in detail under FS-2 Point 7.

In conclusion, greater clarity has been provided within the Final Re-evaluation Report as to the indicative line route presented in the Preliminary Re-evaluation Report.

The text relevant to paragraph 7.3.2 in the Preliminary Re-evaluation Report has been clarified in the final report regarding the evaluation process and outcome, and in particular the reasons as to why ecology and landscape became the focus when evaluating corridors. It is not considered that any amendments are required to the overall conclusions reached in the Preliminary Re-evaluation Report. The amended text is set out below:

"The study area generally consists of a uniform drumlin landscape overlain on a very gradual north-south ridge. There are scenic views and landscapes at a number of locations within the study area, the majority of which are associated with lakes, with the most significant views being in and around the Lough Muckno Primary Amenity Area, and views of Lough Egish from an upland area to the north-east. Additionally, there are views from upland areas including Lough an Lea Mountain, Mullyash Mountain and Kilkitt.

 Route Corridor Option A – Has the least potential to be visible and has the least potential for visibility from sensitive receptors, even though it passes close to two scenic routes near Lough Egish and Shantonagh Lough;

- Route Corridor Option B is located along the most elevated underlying topography of the three routes and will cause the most widespread visibility especially from portions of the N2, though it is the shortest route; and
- Route Corridor Option C passes closest to the most significant landscape resources i.e.
   Lough Muckno and the outskirts of Castleblayney".

#### 2.18 SUBMISSION FS-17:

**Overview:** This submission objects to the proposal due to its proximity to residential properties. Particular concerns raised in the submission relate to health (EMF), visual impact and devaluation of property. It is submitted that EirGrid has adopted an intransigent policy with regards to undergrounding cables and that it is normal policy in other countries.

#### Key points of the submission:

- 1. "The proposed power lines ... will be approximately 400 metres from our house and this is not acceptable for (a) health reasons, EMF and the studies outlining the dangerous health effects that have been conducted also (b) the visual impact that it will have on our home and (c) the devaluation of our property".
- 2. "These disgraceful pylons can be seen from our property, they can and should be put underground".

"EirGrid has adopted an intransigent policy with regards to under grounding these cables, yet in other countries it is normal policy".

"The people in Meath, Cavan and Monaghan do not want these power lines over ground...".

#### **RESPONSE TO KEY POINTS:**

 "The proposed power lines ... will be approximately 400 metres from our house and this is not acceptable for (a) health reasons, EMF and the studies outlining the dangerous health effects that have been conducted also (b) the visual impact that it will have on our home and (c) the devaluation of our property".

**RESPONSE:** EirGrid's acknowledges that these issues are important to affected individuals (including landowners) and the public. **Section 4** of this document sets out the manner in which EirGrid and the Project Team has/will respond to particular general issues raised (including EMF

and visual impact) as part of the progression towards a planning application. Also refer to response provided in respect of FS-7 (point no. 2).

2. "These disgraceful pylons can be seen from our property, they can and should be put underground".

"EirGrid has adopted an intransigent policy with regards to under grounding these cables, yet in other countries it is normal policy".

"The people in Meath, Cavan and Monaghan do not want these power lines over ground...".

**RESPONSE:** Refer to **Section 2.2** and the response to FS-1, Point no. 1 which addresses EirGrid's full response to the underground alternative.

Furthermore, the Final Re-evaluation Report addresses this issue in the context of addressing the findings of the review of the International Expert Commission, the Report of the Joint Oireachtas Committee and the subsequent Government Policy Statement, in respect of the Meath-Tyrone 400 kV Interconnection Development.

#### 2.19 SUBMISSION FS-18:

**Overview:** This submission includes a detailed critique of wind as a source of electrical power in Ireland and specifically argues that, while wind turbines provide a lot of energy, they provide very little power. It calls for a halt to further wind development pending an investigation by a panel comprising engineers, economists and experienced electrical distribution operatives.

#### Key points of the submission:

- 1. "The Aarhus Convention is .... binding on Ireland with regard to projects which impact on the environment. This is such a project and the terms of the convention must be compiled with."
- 2. "There must be a study on the benefits of this project and alternatives must be specified ..... as the project is in part for the purpose of connecting windfarms, the expected contribution of them is relevant".
- 3. "A major issue is whether this project is necessary ..... there are several power stations in the midlands, yet there is no major industrial base in these areas".

#### **RESPONSE TO KEY POINTS:**

1. "The Aarhus Convention is .... binding on Ireland with regard to projects which impact on the environment. This is such a project and the terms of the convention must be compiled with."

**RESPONSE:** EirGrid agrees. Refer to **Section 2.16** and the response to FS-15 - Point no. 3 which details EirGrid's response to matters relating to the Aarhus Convention.

2. "There must be a study on the benefits of this project and alternatives must be specified ..... as the project is in part for the purpose of connecting windfarms, the expected contribution of them is relevant".

**RESPONSE:** A summary of the strategic need, rationale and justification for the project is included in Chapter 2 of the Preliminary Re-evaluation Report. It must be understood that, in proposing a second North-South Interconnector, EirGrid is acting in accordance with its statutory obligations in implementing Government policy.

As outlined by the regulators in their joint report on the case for a second North-South Interconnector in 2004, the need / justification for the project is based on a number of factors including economic, technical and key stakeholder objectives. There is also a wide range of benefits associated with the interconnector that will ultimately benefit consumers and result in domestic savings. These include how investment in electricity infrastructure can reduce congestion on the network, improve productivity rates, increase economic growth rates, reduce long term maintenance and outage costs and facilitate renewable investment.

It should also be noted that Chapter 3 of the Preliminary Re-evaluation Report deals with the alternative technologies considered for the implementation of the development.

Furthermore, Chapter 2 of the Final Re-evaluation Report provides an update on the need and benefits of the project and Chapter 3 of the same report provides an update on the alternatives considered. These will also be matters to be addressed as part of the EIS associated with the new application for approval.

3. "A major issue is whether this project is necessary ..... there are several power stations in the midlands, yet there is no major industrial base in these areas".

**RESPONSE:** The need for the North-South Interconnector is set out in Chapter 2.0 of the Preliminary Re-evaluation Report. In this regard, the relevance of the reference to existing power stations in the Midlands is not clear.

## 3. RESPONSES TO LANDOWNER ENGAGEMENT AND PROPOSED AMENDMENTS ARISING

#### 3.1 LANDOWNER FEEDBACK

As set out in **Section 1.2**, a specific programme of landowner engagement occurred in the context of the Preliminary Re-evaluation Report in May and June 2011. Feedback from this engagement primarily focused on site specific issues, including the project's potential impact on specific landholdings. However, during a number of the discussions between landowners and EirGrid's landowner agents, a number of queries and issues were raised that relate to this process of project re-evaluation. These are responded to below.

## 3.2 Issue 1 - Is there an actual need for the project given the economic downturn?

#### **RESPONSE:**

The strategic 'all island' need for a second high capacity North-South 400 kV Interconnector is outlined in Chapter 2 of the Preliminary Re-evaluation Report. The Report confirms that the original justification for the second North-South 400 kV Interconnector was not based on forecasted growth in electricity consumption, which it is acknowledged has declined for the immediate short-term. Instead it was, and remains, driven by Government policy and certain EU Directives to facilitate strategic medium and longer-term growth. In addition, it must be understood that a relatively long time period is required to construct such transmission infrastructure – the envisaged timeframe for eventual operation of the proposed development is well beyond the considered period of short-term economic downturn. The imperative need to plan and construct the North-South 400 kV Interconnection Development to meet forecasted strategic need is immediate.

Chapter 2 of the Final Re-evaluation Report updates the strategic need, rationale, justification for and benefit of the proposed North-South 400 kV Interconnection Development.

#### 3.3 Issue 2 - Could it run along a disused railway line

#### **RESPONSE:**

Both EirGrid and its environmental consultants recognise the merits of utilising shared infrastructure corridors for linear developments (such as roads, railways, canals, pipelines and power lines, etc.).

The possibility of locating the proposed OHL development alongside the route of an existing disused railway in the Study Area was considered. However, it was ruled out after detailed study because *inter alia* it would direct the transmission infrastructure development into areas of population settlement, in particular Navan Town, as well as a number of villages and settlements.

Furthermore, at the time there was interest in re-establishing a rail link from Dublin to Navan and this was considered to most likely follow the route of the disused railway line from Clonsilla to Navan. It was an objective of the Meath County Development Plan 2007-2013 to keep "*the reservation of the former Dublin-Navan rail line free from development*" (Appendix A of the Meath County Development Plan 2007-2013).

The disused Navan railway line was subsequently formally selected as the preferred route alignment for the Dublin to Navan rail link by the Department of Transport. Phase I (providing a spur from the Maynooth line at Clonsilla to serve Dunboyne / Pace Interchange) was opened in September 2010. The preparation of the Railway Order application for Phase II (extending the service to Navan) was substantially completed but was deferred by the 'Infrastructure and Capital Investment 2012 – 2016 Medium Term Exchequer Framework' published in November 2011. Notwithstanding this, in the Meath County Development Plan 2013 – 2019, the National Transport Agency (NTA) *"indicated that it intends to formally request Meath County Council to include an objective in its Development Plan to protect and preserve the identified Navan Rail corridor once the NTA's draft transport strategy is adopted. Pending this, the NTA have requested that Meath County Council continue to protect the corridor free from development that might compromise the future delivery of the rail scheme to Navan."* 

#### 3.4 Issue 3 - Why is the substation at Moyhill no longer deemed necessary?

#### **RESPONSE:**

The rationale for why the substation in Moyhill is not included in the current application for planning approval is explained in Chapter 4 of the Preliminary Re-evaluation Report.

In summary, the report states that the 2009 application for approval proposed an intermediate substation (referred to in that application as Moyhill Substation) to reinforce the north-east for security of supply reasons. The need for this reinforcement was based on projected electricity demand in the region at the time. The latest revised demand forecasts published by EirGrid however indicate a longer and sustained depression of demand and a longer and slower recovery of growth than what

was previously estimated. As a result it is now envisaged that this intermediate substation will not be required within the next ten years. Consequently it would not be appropriate, in the context of proper planning and sustainable development, to include this element of the overall project in the new application for approval of the proposed North-South 400 kV Interconnection Development. At some stage thereafter electricity consumption in the north-east will however grow to a level that further reinforcement of the local transmission network will be required for security of supply reasons. At this point in time it is envisaged that such reinforcement will include the construction of the intermediate substation on the proposed Turleenan-Woodland 400 kV OHL that would connect it to the existing Flagford-Louth 220 kV OHL.

The fact that EirGrid is now of the opinion that the intermediate substation will not be required for at least ten years is significant as it is considered that it would not be appropriate, in the context of proper planning and sustainable development, for a developer to apply for planning permission for something which he does not expect to commence within ten years of receipt of planning approval. It is expected therefore that the intermediate substation will not be included in the planning application for the Interconnector but will instead be the subject of its own application (and environmental assessment) at a later date, when the need arises. However, given the possibility of this substation being proposed at some point in the future and the possibility that it may be in the vicinity of Kingscourt (but not necessarily at Moyhill) it is considered reasonable that an environmental impact assessment of the potential impacts arising from the possible future development of the intermediate substation should be included in the EIS as part of the consideration of potential impacts on the environment, including cumulative impacts, for the North-South Interconnector Development.

# 3.5 Issue 4 - Can EirGrid prove that no adverse health impacts will be associated with the project if it proceeds?

#### **RESPONSE:**

EirGrid follows the guidance and instruction of international expertise and best practice. In this regard, an extensive worldwide risk assessment has been carried out by the World Health Organisation (WHO) and the International Commission on Non-Ionizing Radiation Protection (ICNIRP). The outcome of this risk assessment was the establishment, by ICNIRP in 1998 of *its 'Guidelines for limiting exposure to time-varying electric, magnetic and electromagnetic field (up to 300 GHz)*'. These Guidelines specify a 'reference level' of 100 microtesla for exposure of the general public to time-varying magnetic fields.

Both the WHO and the European Commission (EC) have endorsed these guidelines. The 1998 ICNIRP Guidelines form the basis of EU Council Recommendation 1999/510/EC which transcribes the EU Guidelines. The Irish Government has adopted the EU Guidelines without variation. EirGrid designs and operates the Irish Transmission network in accordance with the EU Guidelines. As with

all transmission infrastructure development in Ireland, the North-South 400 kV Interconnection Development will comply with these EU Guidelines.

In December 2010, ICNIRP published its new *Guidelines for Limiting Exposure to Time-Varying Electric and Magnetic Fields (1 – 100 kHz).* A Fact Sheet summarising the new Guidelines can be accessed on the ICNIRP website at <u>www.icnirp.de</u>. In the new Guidelines the specified 'reference level' for exposure of the general public to time-varying magnetic fields has been increased to 200 microtesla. In other words, this threshold has been raised.

The EU Guidelines have not been amended in accordance with the new ICNIRP Guidelines so they still refer to the lower reference level of 100 microtesla. EirGrid must still comply with these as they remain the official Guidelines in Ireland. The North-South 400 kV Interconnection Development will be designed accordingly in reference to this more conservative reference level.

Based on an analysis of the body of research into this matter by the European Commission, the Chief Scientific Adviser to the Irish Government in his position paper "A Review of Recent Investigations into the Possible Health Effects of Exposure to Electromagnetic Fields (EMF) from Power Lines" (July 2010) concluded that it "is simply not possible for the level of energies associated with power lines to cause cancer".

Dr William H Bailey, PH.D in his evidence to the oral hearing in respect of the previous application for approval for the North-South 400 kV Interconnection Development advised that *"The project EMF exposures from the proposed line are of low intensity and below reference levels recommended by ICNIRP and adopted throughout the European Union to protect public health where the public spend significant time"*. He concludes *"In conclusion, health and scientific agencies including the WHO and other agencies in Europe and Ireland have reviewed and evaluated research on the topic of EMF for the last 30 years. The conclusions of these assessments, which have followed a scientific process for the assessment of the research, are the same: the research does not support the conclusion that electric or magnetic fields are the cause of cancer, or any other long-term health effects."* 

In this regard, EirGrid will continue to follow the guidance and instruction of international expertise and best practice.

Additional information about electric and magnetic fields in Ireland can be found in "EMF and You", an EirGrid information brochure available from <u>www.eirgridprojects.com</u>.

#### 3.6 Issue 5 - Why can the line not be put undergrounded?

#### **RESPONSE:**

While an underground alternative may be the preference of many of the stakeholders who have engaged on the project to date; EirGrid has to be guided by its technical expertise and experience in this matter. Refer to **Section 2.2**, FS-1 – point no. 1 which sets out EirGrid's full response to this.

Furthermore, the Final Re-evaluation Report considers this issue in the context of addressing the findings of the review of the International Expert Commission and subsequent Government Policy Statement in respect of the Meath-Tyrone 400 kV Interconnection Development and the Government Policy Statement.

#### 3.7 Issue 6 - Impacts on air space including flying aircraft?

#### **RESPONSE:**

There are two airfields in the study area: Trim Airfield located north-east of Trim, and Summerhill Airfield located north of Summerhill.

It is noted in respect of the previous application for approval for the North-South Interconnection Development, that the Irish Aviation Authority, in its submission to An Bord Pleanála, advised that it had "no observations on the proposals".

However, during the re-evaluation process a modification was made to the indicative line route near Trim Airfield that will provide an even greater extent of clearance margin outside of the approach surface which will allow a greater level of flexibility later on when siting towers along this stretch of the route.

# 3.8 Issue 7- Concerns for impact on agriculture, with a request that in order to minimise crop damage construction should only occur *"after the harvest*"?

#### **RESPONSE:**

ESB, as the statutory body responsible for constructing the proposed development, will take every care during construction of the line to ensure that interference with farmers' operations and crop damage will be minimised or avoided altogether.

However, it must be acknowledged that ESB has considerable experience in the construction of electricity infrastructure over many decades, and fully understands the concerns of farmers and other directly affected landowners. All access for construction will be discussed and agreed with landowners in advance.

## 3.9 Issue 8 - Improvements on timing of landowner engagement, with a request for *"more time to review the information and literature"*

#### **RESPONSE:**

At all stages, EirGrid's objective has been to provide an accessible, meaningful, and accountable consultation process. In order to make the process as meaningful as possible for landowners, landowner agents generally seek to call to landowners as soon as possible after letters are sent out, in order to ensure that directly affected landowners have received the information and to answer queries. This was the strategy for landowner engagement which occurred in respect of the Preliminary Re-evaluation Report.

Landowner agents are available at all stages of the consultation to meet with landowners, so if landowners are unprepared when the landowner agent calls, they are available to reschedule and meet with them at another agreed time.

Further landowner engagement will occur during the next stage – Route Confirmation – of project development, and landowners will continue to have an opportunity to influence the siting of the alignment of the proposed development.

# 3.10 Issue 9 – Is the line route as indicated fixed, or is there an element of flexibility at this stage?

#### **RESPONSE:**

There remains flexibility at this stage in the line route design process in terms of the location of towers.

EirGrid acknowledges landowner concerns in respect of the project's potential impact on specific landholdings; it continues to seek to allay concerns by reaching agreement with landowners on the specific location of towers, by seeking to proactively engage with landowners, to seek to site towers at locations which mitigate potential impacts on current farming practices and other land uses, while trying to balance other competing priorities such as environmental constraints and distance to dwellings.

As part of the detailed line design process, EirGrid will assess any suggested alternative localised amendments to determine the potential environmental impacts. Where these can be accommodated, without creating additional environmental impacts, they will be further considered. Where it is assessed that they would create additional avoidable significant environmental impacts, it is unlikely that they will be further considered or adopted. All localised assessments will form part of the ongoing EIA process.

## 4. RESPONSES TO OTHER ISSUES AND PROPOSED AMENDMENTS ARISING

#### 4.1 OTHER ENGAGEMENT FEEDBACK

During, and subsequent to, the consultation on the Preliminary Re-evaluation Report, issues were raised by interested parties (collated from a variety of sources including written submissions, phone calls and meetings) which are not directly relevant to the Preliminary Re-evaluation Report. These issues however are of relevance to affected landowners and for the specific project design and Environmental Impact Assessment (EIA) stages in the project development process. A summary of the issues raised is set out in **Table 4.1.** The majority of these relate to the potential impact of the proposed development on environmental concerns.

Issue Reference	Issue
I-1	Health
I-2	Ecology
I-3	Technology
I-4	Material Assets
I-5	Cultural Heritage
I-6	Landscape
I-7	Need
I-8	Compensation
I-9	Agriculture
I-10	Noise
I-11	Construction
I-12	Water
I-13	Geology

 Table 4.1:
 Issues Raised During Other Engagement

It is evident from Chapters 5 – 9 of the Final Re-evaluation Report that environmental assessment work has informed the decision making process of the development of the project from an early stage. Further consideration of environmental issues is also a fundamental requirement of EIA. In this

regard, in accordance with European Union and Irish national law, it is considered that the North-South 400 kV Interconnection Development will require an EIA to be undertaken and, hence, an Environmental Impact Statement (EIS) will be required as part of the application for approval to An Bord Pleanála.

The particular focus of the route confirmation stage is a preferred line design; and the preferred line design for the North-South 400 kV Interconnection Development will be published in due course in a Preferred Project Solutions Report. With the identification of a preferred line design, the Project will be developed to a level of detail considered sufficient to allow EirGrid and its consultants to consider where significant impacts are likely to arise and those matters to be addressed / included in the EIS. Consultation with both statutory and non-statutory consultees, as well as the public during the re-evaluation process, as well as knowledge gained from the previous planning application, means that this can be done with a reasonable degree of certainty.

The Preferred Project Solutions Report will therefore provide clarification on what EirGrid and its consultants determine to be the likely environment impacts arising from the proposed development. This will be set out under a series of environmental headings.

In respect to the other issues identified in **Table 4.1**, it is envisaged that the Preferred Project Solutions Report, will also provide a summary of the key construction works and activities associated with OHL in order to seek feedback from the public (and landowners in particular) on the proposed methodology, issues arising and construction related environmental considerations to be addressed in the EIS.

EirGrid would also refer interested parties to the Frequently Asked Questions (FAQ's) Sheets which have been developed for the North-South 400 kV Interconnection Development and which provide answers to a number of the most commonly asked questions on the Project.

### 5. CONCLUSIONS AND FEEDBACK

#### 5.1 CONCLUSIONS

This report has set out a comprehensive summary of public, landowner and other stakeholder feedback arising from consultation that has occurred in respect of the Preliminary Re-evaluation Report (and other engagement) concerning the North-South 400 kV Interconnection Development. The Terms of Reference of this Report are set out at **Section 1.3** of this Report.

This Report sets out the response of EirGrid and its consultants to the consultation feedback received in respect of the Preliminary Re-Evaluation Report and otherwise. It also sets out any consequent amendments that have been made to the Final Re-evaluation Report. Of particular note, this Report has acknowledged that the International Expert Commission (IEC) review on a case for, and cost of, undergrounding all or part of the Meath-Tyrone 400 kV Interconnection Development, and the subsequent Joint Oireachtas Committee on Communications, Natural Resources and Agriculture report on its consideration of the IEC review, were both published outside the formal period of public consultation in respect of the Preliminary Re-evaluation Report. This is also the case with the subsequent Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure. The findings of the IEC review, the subsequent JOC report, and the Government Policy Statement, have been considered in the Final Re-evaluation Report.

A number of issues were raised and documented in this report which it was considered should be better clarified in the Final Re-evaluation Report by means of additional or revised explanatory text; this has occurred in the final Report. However, no issues were identified that would alter the recommendation of EirGrid and its consultants that the identified Route Corridor Options A and 3B remain the least constrained (and thereby preferred) options, from a technical, environmental and community perspective, for the North-South 400 kV Interconnection Development.

In addition, no issues were identified that would significantly alter the general alignment of the indicative line route within Route Corridor Options A and 3B as identified in the Preliminary Reevaluation Report. There have been a number of localised modifications to the indicative alignment, arising from *inter alia* the process of landowner engagement in respect of the Preliminary Reevaluation Report.

It needs to be understood, however, that this is only an indicative alignment, for the purposes of ongoing technical and environmental analysis, and public and landowner consultation and engagement. Issues relating to the specific alignment of the planned circuit, including potential local modifications to the alignment, are more appropriately associated with, and thereby addressed by, the process of route confirmation and environmental impact assessment which will occur subsequent to this re-evaluation process, in consultation with landowners and other stakeholders. The particular focus of this subsequent stage of route confirmation will comprise the preferred line design of the North-South 400 kV Interconnection Development which will be published in due course in a Preferred Project Solutions Report. As such, while these issues are of clear concern, both to EirGrid, directly affected landowners, and other parties, they are not matters that are most appropriately resolved in this re-evaluation process.