



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

Decision on Electricity Network Connection Policy

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Abstract:

This paper provides the Commission's decision on a number of issues related to both ESB Networks and EirGrid's policy for the connection of renewable generators to the electricity transmission network and the connection of all types of generators (excluding micro-generators) to the electricity distribution network in Ireland.

The decision covers numerous issues that were initially raised by wind farm developers. These include the level of certainty included with the connection contracts offered by ESB Networks and EirGrid, and the capacity bond that must be put in place by parties that are connecting to the electricity network.

Target Audience:

This decision paper is for the attention of members of the public, the energy industry, customers and all interested parties. It will be of particular interest to members of the energy industry that are interested in connecting renewable generators to the electricity transmission network or any type of generators (excluding micro-generators) to the electricity distribution network in Ireland.

Related Documents:

[CER/08/145](#) Consultation on connection policy
[CER/09/072](#) Proposed decision on connection policy

Executive Summary

This paper provides the Commission's decision on a number of issues related to both ESB Networks and EirGrid's policy for the connection of renewable generators to the electricity transmission network and the connection of all type of generators (excluding micro-generators) to the electricity distribution network in Ireland.

The decision covers numerous issues that were initially raised by wind farm developers. While all of the issues have been responded to within Section 2.0 of this paper, a summary of the Commission's decision on three of the more important issues is provided here.

Decisions relating to the planning/preconstruction phase and increased certainty within the connection contracts relate to renewable connections only. Decisions in relation to the capacity bond cover renewable generators that are connecting to the transmission system and all types of generators (excluding micro-generators) that are connecting to the distribution network. There are no changes to the capacity bond arrangements that are in place for non-renewable generators that are connecting to the transmission system.

Planning/pre-construction phase

The Commission endorses the proposals that were previously put forward by the DSO regarding this phase of the project. The increased level of information sharing included in those proposals was welcomed by all parties. The TSO has confirmed that it currently follows a process which is broadly similar to that put forward by the DSO.

As part of this consultation process, some developers had requested that the System Operators would put signed agreements in place with landowners prior to applying for and receiving planning permission for connection assets. However, having considered the views put forward by all parties, the Commission does not direct that the System Operators put signed agreements in place at that stage of the process. Further detail on this issue is provided within this decision paper.

Certainty within contracts

Both the collaborative approach currently utilised by the System Operators and the contractual approach proposed by the IWEA & Synergy (and supported by some other developers) have merit. Therefore, the Commission has decided to allow a mechanism by which developers can request to be connected through either the collaborative approach or an approach that provides for fixed dates with payments for late delivery. The finer details of how this will be implemented will be consulted on separately in the near future.

Note that while the Commission intends that payments to developers will be provided for under this mechanism, it is not envisaged that these payments will cover all of the costs incurred by a developer due to the late delivery of connection assets. As with normal commercial agreements, it is likely that the System Operators will be allowed to include a risk margin within their prices to allow for the risk that they will be faced with (currently there is no risk margin included). It is intended that the risk related to wayleaving/planning problems will not be allocated to the System Operators; it was generally accepted by all parties that this was outside of their control. It is also envisaged that the Use of System customer will not be allocated any risk associated with this mechanism.

Capacity bond

To allow for concerns raised by parties in response to this consultation process, the Commission has decided to allow all renewable generators and all generators that are connecting to the distribution system the opportunity to reduce their MEC by any amount up to the start of construction. There will be a charge of €10k per MW for any reduction. One month prior to energisation, a €25k per MW bond will be put in place for the remainder of the MEC. Moving the placement of this bond from offer acceptance stage to one month prior to energisation will reduce the cost incurred by developers when financing this bond. Developers will, however, be required to pay for the connection costs as detailed in their original offer, unless they receive a revised offer through a successful modification request. Developers that have the current bond in place will be allowed to move to this new bonding arrangement if they choose to do so.

There are no changes to the capacity bond arrangements that are in place for non-renewable generators that are connecting to the transmission system

Note that this document is a decision paper. However, as outlined above, a consultation will shortly be undertaken on the methodology through which the above high level decisions (on the option for renewable generators to connect via a process that would include the provision of a fixed date for the delivery of connection assets, with late delivery resulting in a payment to the connecting party) will be implemented.

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1.0 Introduction

1.1 The Commission for Energy Regulation

The Commission for Energy Regulation ('the Commission') is the independent body responsible for overseeing the regulation of Ireland's electricity and gas sectors. The Commission was initially established and granted regulatory powers over the electricity market under the Electricity Regulation Act, 1999. The enactment of the Gas (Interim) (Regulation) Act, 2002 expanded the Commission's jurisdiction to include regulation of the natural gas market, while the Energy (Miscellaneous Provisions) Act 2006 granted the Commission additional powers in relation to gas and electricity safety. The Electricity Regulation Amendment (SEM) Act 2007 outlined the Commission's functions in relation to the Single Electricity Market (SEM) for the island of Ireland. This market is regulated by the Commission and the Northern Ireland Authority for Utility Regulation (NIAUR). The Commission is working to ensure that consumers benefit from regulation and the introduction of competition in the energy sector.

1.2 Purpose of this paper

The purpose of this paper is to outline the Commission's decision on policy related to the connection of renewable generators to the electricity transmission network and the connection of all types of generators (excluding micro-generators) to the electricity distribution network in Ireland. While numerous issues are covered within this paper, the more important relate to:

- The level of certainty on costs and timelines that are provided within the contracts that ESB Networks (the "DSO") and EirGrid (the "TSO") offer to generators that are connecting to the electricity network; and,
- The capacity bond that must be put in place by generators that are connecting to the electricity network.

The Commission has already published a consultation (CER/08/145) and proposed decision (CER/09/072) on this matter and has considered all responses received prior to finalising this decision.

The Commission has also published a response-to-comments paper (CER/09/139) which summarises both the comments received to the proposed decision on this matter, and the Commission's responses to those comments. That response paper, and the responses themselves, are published alongside this decision paper.

1.3 Background Information

In early 2008 the Irish Wind Energy Association (IWEA) and the Synergy Grid Group (a number of wind farm developers represented by Philip Lee Solicitors) (collectively the "IWEA & Synergy") approached the Commission to highlight their concerns regarding the standard connection agreements being offered by the

DSO and the TSO (collectively the “System Operators”) for connection to the distribution and transmission system respectively.

To allow all parties gain an understanding of each other’s position, the Commission organised and chaired a number of meetings between the IWEA & Synergy and the System Operators. As part of that process the IWEA & Synergy set out their issues and the System Operators outlined proposals which responded to some of those issues.

Up to that stage, only the IWEA & Synergy, the System Operators and the Commission had been involved in the process and, in order to facilitate wider participation, a consultation paper was published inviting comments from all other interested parties. The consultation paper provided a proposal on the capacity bond and invited comments on both that proposal and on documents that were published alongside that paper, specifically comments were also invited on:

- The issues outlined by the IWEA & Synergy;
- The proposals provided by the DSO; and,
- The proposals provided by the TSO¹.

The generic contract documents for connection to the network which are used by the DSO and TSO were also published alongside the consultation paper².

In total, 12 respondents provided comments on the consultation paper. The Commission subsequently met with those parties to discuss the issues in more detail prior to publishing a proposed decision paper¹. The responses to the original consultation were published alongside that proposed decision paper.

Eight respondents commented on the proposed decision paper; those comments are published alongside this decision paper. All responses were considered prior to the final decision on this matter. The Commission has also published a response-to-comments paper (CER/09/139) which summarises both the comments received to the proposed decision on this matter, and the Commission’s responses to those comments. That response paper, and the responses themselves, are published alongside this decision paper.

The Commission would like to thank the respondents, to both the original consultation and the proposed decision, for providing the necessary resources to engage with the Commission on this issue.

¹ The consultation paper and related documents are provided [here](#). The documents provided on this link include the original issues raised by the IWEA & Synergy, the proposals put forward by the System Operators to address those proposals, the standard contracts for connection to the electricity network, and the Commission’s consultation paper. The responses received to the consultation and the proposed decision on this matter are also available on that link.

² These connection contracts were originally consulted on and approved by the Commission in 2000, and were updated at various stages to allow for market developments such as the introduction of the Single Electricity Market.

The Commission now publishes its decision on this matter under Section 34 of the Electricity Regulation Act 1999. Section 34 provides detail on the Commission's functions with regards to issuing directions relating to the terms and conditions under which parties are provided with agreements for connection to or use of the electricity transmission or distribution system in Ireland.

1.4 Structure of this paper

This paper is structured in the following manner:

- **Section 1** provides an introduction, background information and the structure of the paper;
- **Section 2** discusses the 31 issues that were initially raised by the IWEA & Synergy;
- **Section 3** discusses the planning/design phase of connection assets;
- **Section 4** discusses the level of certainty within standard contracts for connection to the network;
- **Section 5** discusses the capacity bond; and,
- **Section 6** contains a summary of the decisions outlined in this paper.

The Commission has also published a response-to-comments paper (CER/09/139) which summarises both the comments received to the proposed decision on this matter, and the Commission's responses to those comments. That response paper, and the responses themselves, are published alongside this decision paper.

2.0 Initial concerns raised by the IWEA & Synergy

2.1 Introduction

2.1.1 Background

As detailed in Section 1.3, in early 2008 the IWEA & Synergy approached the Commission to highlight their concerns regarding the standard connection agreements being offered by the System Operators for connection to the distribution and transmission systems.

The initial concerns raised by the IWEA & Synergy consisted of 31 points¹. These points have been individually documented within Section 2.2 of this paper, along with any proposals put forward by the System Operators to address those points and the Commission's position on each point. In some instances particular issues have been discussed further within other sections of this document and this has been indicated under the relevant point.

In addition to the above issues, the TSO provided some suggested improvements to the connection contracts for parties connecting to the transmission system. In summary, these related to:

- A number of modifications to the connection agreement to provide greater transparency; and,
- A number of modifications related to other issues not specifically raised by the IWEA & Synergy such as insurance requirements, security provisions and some more general amendments, for example, typographical corrections.

These suggested improvements were also published within a TSO document as part of the previous consultation¹.

The DSO also volunteered some general improvements to the Distribution Connection Agreement. These will be examined as part of a separate consultation which will be initiated shortly.

A number of the issues raised by the IWEA & Synergy do not relate to both transmission and distribution. Therefore, in addition to providing responses to the 31 points initially raised by the IWEA & Synergy (those responses are detailed under the relevant points within Section 2.2 below), the TSO also provided information highlighting the differences that exist in respect of both the industry structure and contractual arrangements pertaining at transmission and distribution. This aids in providing a context to both its responses and the remainder of the paper. This information is summarised in the following section.

2.1.2 Industry structure and contractual arrangements

In addition to providing responses to the 31 points initially raised by the IWEA & Synergy, the TSO also provided some background information aimed at providing some context to those responses. In summary, the TSO highlighted differences that exist in respect of both the industry structure and contractual arrangements pertaining at transmission and distribution.

The TSO stated that it understands that the main concerns raised by the IWEA & Synergy revolve around certainty and transparency on connection lead-times and costs. It notes that the contestability rights afforded to transmission connecting parties to construct part or all of their connection does mean that a number of the issues raised can be the responsibility of the connecting party.

In relation to connection lead-times, at connection offer stage the TSO provides connecting parties with its best estimate of the time it will take to construct and commission the shallow connection works and any associated deep reinforcements. Connecting parties do, however, have the option of building their connection to the transmission system themselves, contestably, and therefore the lead-time for completing the (shallow) connection works can largely be controlled by the connecting party. Once a connection offer is accepted, the TSO ensures that the connecting party is kept regularly informed of progress on the shallow connection works (and deep transmission assets) through regular (usually monthly) progress meetings. The obligations placed on the TSO and the connecting party to provide information prior to, and keep each other appraised of progress during, the consenting, construction and commissioning processes are comprehensively captured in Schedule 10 of the Transmission Connection Agreement.

The TSO noted it is worth remembering that, although it is the contracting party, the level of control it has on the lead-times for transmission works is somewhat limited. Although the TSO is responsible for the activities connected with seeking and obtaining the necessary consents, SI 445 (2000), which gives effect to the current electricity industry arrangements, amongst other things, assigns the responsibility for constructing (non-contested) transmission infrastructure to ESB Networks as the TAO.

The TSO also notes that its connection offers are priced on a fixed (standard) charge basis, with certain pass-through elements and underpinned by a set of standard assumptions. The pass-through elements are line length, Grid Code/commissioning testing and project management fees (for contestable offers) and estimates for these are quantified in the connection offer. The TSO's 'standard charges' approach has several benefits, including providing certainty for customers and allowing the TSO to undertake a desk exercise to determine the connection charge and hence to fit in to a streamlined process for the provision of connection offers. However the charges cannot, and do not seek to,

take into account the specific circumstances for any particular connection. Rather, the aim is that for any given transmission equipment, the charges are broadly cost reflective, representing the range of conditions encountered by the TSO.

The charges used to price transmission network development and transmission connection assets for Gate 2 were submitted to the Commission as part of the 2006-2010 Revenue Control. The Commission determined, in the Revenue Control, that these costs are “broadly acceptable” and in line with international benchmarks³. The standard charges that will be used to price transmission connection assets for Gate 3 have recently been approved by the Commission, following a consultation process with industry⁴.

Under the arrangements set out in the Infrastructure Agreement (IA), signed between the TSO and ESB Networks (as TAO), ESB Networks is responsible for providing and maintaining up-to-date standard costs for transmission works.

The TSO also stated that it is liaising with ESB Networks regarding the manner in which the TSO’s costs for any shared (shallow) transmission works are captured in the connection offers made by the DSO to distribution connecting parties.

2.2 *Thirty one points*

2.2.1 Point #1: Development of routes and pricing

IWEA & Synergy’s original issue – Part A

The IWEA & Synergy stated that a preliminary line route for both overhead line and underground cable connection methods should be identified (together with a supporting map or maps) and priced in the quotation/offer letter.

They also stated that connection offer pricing for the overhead line connection method should be firm as it is the Least Cost Technically Acceptable connection method (the LCTA). The connection offer pricing for the underground cable connection method should be an early indicative and reasonable estimate (attaching as much certainty as possible).

³ While as part of the 2006-2010 revenue determination the Commission determined that these costs were broadly acceptable for use as part of that revenue determination, they have not been specifically approved as standard prices for use as part of the Group Processing Approach. It should also be noted that while the prices used as part of the revenue control will be subject to an ex-post review, the standard prices for the Group Processing Approach will not and therefore these required a greater level of scrutiny at the ex-ante stage prior to approval for Gate 3.

⁴ The Commission’s decision on standard transmission charges and timelines (CER/09/077) is available [here](#). It should be noted that the decision on standard charges also requested comments on a stakeholder ‘open book’ proposal for the pricing of connection assets.

DSO response – Part A

Subsequent to the above points being raised by the IWEA & Synergy, the DSO brought forward proposals which impact on this point⁵. These were consulted on and published as a decision within the Commission's Gate 3 decision paper⁶.

In summary, a new process will be adopted to allow Gate 3 developers to meet both system operators pre-offer issue and to receive, if they choose, an offer based on their dedicated shallow assets being undergrounded. In addition, developers will have an option to underground shared assets, providing all developers sharing said assets request an undergrounding in writing. The new process is being introduced on customer service and efficiency grounds and means that developers will not have to wait to explore the undergrounding option through the normal offer modification process after their offers, and in some cases all Gate 3 offers, have been issued.

TSO response – Part A

The TSO responded to state that if applicants wish to obtain quotations for both overhead and underground options as part of their connection offer then this is something which it is open to exploring further. It notes that there will be extra costs involved in processing additional options and there can also be technical issues associated with relatively long (>5-10kms) underground transmission cables which may not arise for overhead lines.

Commission position – Part A

While the new process endorsed within the Gate 3 paper will not provide a route and price for overhead and underground options within the connection offer (as requested by the IWEA & Synergy), the process that is to be put in place does deal with the underlying issue that was raised.

IWEA & Synergy's original issue – Part B

The IWEA & Synergy stated that the Commission's decision titled 'Standard Pricing Approach for Connecting Renewable Generators to the Distribution Network' endorses the DSO proposals that DSO connection offer pricing be based upon a desk top study, a site visit and approved standard charging. This decision must be complied with as a matter of course.

They understand that for TSO connection offers there is no standard charging, that only a desk top study is done and that a drive through survey or connection point analysis does not always take place. Connection distances appear to be desk top approximations with over 30% added at times for uncertainty and the route lined is assumed. They require that a common agreed methodology for the

⁵ Note the proposals referred to here are separate to the other proposals which were brought forward by the System Operators and published previously as part of this consultation process.

⁶ CER/08/260: CER Direction on Criteria for Gate 3 Renewable Generator Offers and Related Matters is available [here](#). The relevant sections of that paper are Section 5.24 and Appendix A.

feasibility of the connection method be adopted by the DSO and TSO (including the introduction of standard pricing for transmission connection assets).

TSO response – Part B

The TSO responded to state that its connection offers are priced using standard charges developed by the TSO⁷.

The TSO clarified that line lengths for transmission connection offers are based on a straight line point-to-point calculation (subject to obvious obstacles, for example, a water estuary) with a 25% factor added.

The TSO also noted that performing preliminary route analysis as part of the connection offer process would add additional processing time and cost.

Commission position – Part B

As stated above by the IWEA & Synergy, the Commission's decision entitled 'Standard Pricing Approach for Connecting Renewable Generators to the Distribution Network' should be complied with⁸. No evidence has been provided to demonstrate that this it is not the case. If any party receives a connection offer which it feels does not comply with the above decision document, then that party is entitled to dispute its offer to the Commission.

The IWEA & Synergy highlighted differences between the methodologies used to produce TSO and DSO connection offers, and requested that a common agreed methodology be introduced. The Commission has not been provided with any evidence of substantial benefits that would accrue from the adoption of a common methodology.

The IWEA & Synergy requested that standard pricing for transmission assets be introduced. These have recently been approved by the Commission following a consultation process that was carried out in parallel with this consultation on connection policy⁷.

2.2.2 Point #2: Planning and consents

IWEA & Synergy's original issue

The IWEA & Synergy stated that the quotation/offer letter should contain a list of what planning and other consents are required to be obtained by the System Operators in respect of the connection method including details of the relevant

⁷ Since these issues were initially raised standard charges for transmission assets have been approved by the Commission following consultation with industry. It is intended that these will be utilised for pricing future offers. This decision document (CER/09/077) is available [here](#); the paper also requests comments on a stakeholder 'open book' proposal for the pricing of connection assets.

⁸ Some items within that paper may have been superseded by subsequent Commission directions. For those items the policy in place at the time any action was taken should have been complied with.

planning procedure (for example, traditional or strategic infrastructure) and whether an environmental impact statement is required.

DSO response

The DSO proposed that as part of any connection offer it will identify what elements of the connection will require planning permission and from whom.

TSO response

The TSO has stated that it is agreeable to the principle of including a list of what planning and other consents are required to be obtained in connection offers.

Commission position

The above proposals by the DSO and TSO deal with most elements of the issues raised by the IWEA & Synergy. However, the request for information on whether an environmental impact statement would be required was not specifically addressed. This information should also be provided to the developer once it has been confirmed. The adoption of the above proposal will cover off the issues raised by the IWEA & Synergy.

2.2.3 Point #3: Planning and consents

IWEA & Synergy's original issue

The IWEA & Synergy stated that following offer acceptance the System Operators should identify all landowners along the overhead line route. An agreed time period should be incorporated into the connection agreement for the System Operators to enter into agreements with landowners and other third parties along the overhead line route so as to secure all necessary wayleaves and third party consents. Where agreements have not been forthcoming from all landowners along the route within the specified time, a liaison mechanism should be incorporated into the connection agreement pursuant to which the Customer will have a number of options, including the option to request that the System Operators exercise their statutory powers to secure the consents and/or to proceed on the basis of the underground cable connection method.

TSO response

The TSO stated that its standard offer includes an estimate for the time required for securing consents. Its connection agreement also includes a contractual longstop date for securing the necessary consents.

The TSO also highlighted that the option for parties to seek to modify the terms of their connection agreement, for example, to change from overhead to underground, exists already (cf. clause 21 of the Connection Agreement General Conditions).

It also noted that the contestability option available for transmission connecting parties means that a number of the issues raised can be the responsibility of the connecting party.

Commission position

The response provided by the TSO covers off some aspects of this issue from a transmission perspective. However, a number of outstanding issues remain from both a distribution and transmission perspective. Therefore this point is discussed further in Section 3.0 of this paper.

2.2.4 Point #4: Planning and consents

IWEA & Synergy's original issue

The IWEA & Synergy stated that where an underground solution is being proceeded with, agreed timelines should be incorporated for the System Operators to secure any necessary consents from competent authorities, for example, road opening permits.

DSO response

Section 2.2.1 of this paper provides detail on the DSO's proposals regarding when developers can request that elements of their connection assets be undergrounded.

However, this specific point relates to agreeing timelines for securing consents once it has been decided to proceed with the undergrounding option. The DSO proposed that:

- It would as part of the connection offer provide to the developer an outline programme (in Gantt chart format) setting out the workstreams and the critical path to achieving the Consents Issue Date⁹, Connection Works Completion Date and Operational Date.
- After acceptance of the connection offer the DSO will appoint a Project Leader who will contact the developer and provide information on the delivery of the programme. This will include information on when the various elements of the pre-deliverable process will be completed.
- It would at Consents Issue Date provide an updated programme (in Gantt chart format) setting out the work-streams and the critical path to achieving the Connection Works Completion Date and the Operational Date.
- Prior to the 55% stage the DSO will also agree a schedule of progress review meetings at which the progress of the project will be reviewed and delays and snags that could impinge on the delivery of the project will be identified.

⁹ There will shortly be a consultation on the contracts that the DSO issue to parties that connect to the network. This may lead to a change to / removal of the term 'consents issue date'. If this occurs, then it is expected that the proposals/decisions, etc within this paper would be implemented at an equivalent point on the timeline.

TSO response

The TSO response regarding this point is as per Section 2.2.3 above.

Commission position

The above proposals by the DSO deal with most elements of the issue raised by the IWEA & Synergy. If the initial offer is based on an underground connection then the programme will include timelines for securing consents, etc. If the initial offer is based on an over-head-line connection and this is later changed to an underground connection, then it seems sensible that the DSO would issue a revised Gantt chart with the revised offer.

Concerning the request that agreed timelines be incorporated into the Connection Offer, the DSO's proposal to provide a Gantt chart to subgroup members would provide them with information on those timelines. Therefore, the Commission does not see a necessity for these details to also be documented within the connection contracts. To ensure that the information provided within the Gantt chart does meet the requirements of connecting parties, the Commission intends to publish a DSO example of such information and interested parties will have an opportunity to comment.

The response by the TSO also covers this off from a transmission perspective.

2.2.5 Point #5: Planning and consents**IWEA & Synergy's original issue**

The IWEA & Synergy stated that an agreed time period should be incorporated into the Connection Agreement for the System Operators to submit an application for any necessary planning permission.

DSO response

The DSO proposed that on acceptance of the connection offer information would be provided to the developer on the delivery of the programme. This would include information on when the various elements of the pre-deliverable process are to be completed including the preparation and submission of planning application. Subsequent to the initial response, the DSO has also communicated that an incentive mechanism may be appropriate to deal with the timely submission of planning applications.

TSO response

The TSO response regarding this point is as per Section 2.2.3 above.

Commission position

The above proposals by the DSO deal with most elements of the issues raised by the IWEA & Synergy. The request that agreed timelines be incorporated into the Connection Agreement has not been accommodated by the DSO's proposals.

The Commission accepts the point that the enhanced collaboration will bring greater transparency to the developer and an understanding of the steps that the DSO takes to submit an application for planning permission. There is obviously an obligation on the DSO to demonstrate to the developer that all reasonable steps are been taken to ensure that the application is submitted in a timely manner and that the application has the best chance of being approved by the planning authority. Given the basis of the offer, the Commission accepts that having a fixed date for submission of a planning application would not be desirable. However, the Commission does expect the DSO to explain to the developer, in the meetings held subsequent to acceptance of all the offers in the sub-group, the process and timeline for submitting a planning application.

This position is also true for transmission connections, for which the TSO states that the standard offer includes an estimate for the times required for securing consents. In addition, on foot of a proposal from the TSO, the Commission and the TSO have entered into an incentive mechanism whereby the TSO is incentivised to lodge planning applications for shallow connection assets in a timely manner.

The merits of providing an incentive mechanism on the DSO to ensure the timely submission of distribution planning applications will be explored when the Commission consults on detailed arrangements regarding fixed timelines for the construction of connection assets.

2.2.6 Point #6: Information sharing

IWEA & Synergy's original issue

The IWEA & Synergy stated that the connection agreement needs to contain a mechanism for regular reporting and information sharing during the pre-construction phase and construction phase. For example, the connection agreements do not capture the choices that a developer has when it comes to the decision to cease pursuing an overhead line solution and go underground. Given that this is a common and important decision point for many developers, the connection agreement should clearly provide for an opportunity for the developer to consider this option, the pre-conditions to making the change, what happens to costs incurred to date, any limits to when it may not be allowed and how long it will take to update the connection offer. It is important that it is not a fresh connection offer, but an updating of the existing offer.

DSO response

The DSO proposed that it would as part of the connection offer provide to the developer an outline programme (in Gantt chart format) setting out the workstreams and the critical path to achieving the Consents Issue Date⁹, Connection Works Completion Date and Operational Date.

After acceptance of the connection offer the DSO will appoint a Project Leader who will contact the developer and provide information on the delivery of the programme. This will include information on when the various elements of the pre-deliverable process will be completed.

It would at Consents Issue Date provide an updated programme (in Gantt chart format) setting out the work-streams and the critical path to achieving the Connection Works, Completion Date and the Operational Date.

Prior to the 55% stage the DSO will also agree a schedule of progress review meetings at which the progress of the project will be reviewed and delays and snags that could impinge on the delivery of the project will be identified.

Developers can apply to change the connection method via the modification mechanism. The timelines regarding modification requests are given in the Commission's Gate 3 decision paper.

TSO response

The TSO responded to state that its standard agreement already includes a comprehensive mechanism of engagement between the TSO and the connecting party (cf. Schedule 10 of the Connection Agreement). As noted in its response to Point 4 above, the option for parties to seek to modify the terms of their connection agreement, for example, change from overhead to underground, exists already (cf. clause 21 of the Connection Agreement General Conditions).

Note: The above response by the DSO related to information sharing between the DSO and developers. However, IWEA & Synergy also highlighted some issues regarding the choice to move from an over-head-line to an underground connection. This was covered from a transmission perspective by the TSO's response to this point. The distribution perspective is provided between Section 2.2.1 of this paper and the Gate 3 decision paper. Section 2.2.1 of this paper provides detail on DSO proposals regarding when developers can request that elements of their connection assets be undergrounded prior to the issuance of the connection offer. The Gate 3 decision paper describes how developers can choose to move to an underground solution after the issuance of the connection offer (via the modification process).

Commission position

The above proposals by the DSO deal with most elements of the issue regarding regular reporting raised by the IWEA & Synergy. While it had been requested that the mechanism for regular reporting would be incorporated into the Connection Agreement, this has not been accommodated by the DSO's proposals. However, since the DSO is to comply with the above proposal the Commission does not see a necessity for these details to also be documented within the connection contracts.

The IWEA & Synergy also requested clarity on the detail of how requests to change from an over-head-line connection to an underground connection would be dealt with. It seems sensible that any change to the offer would be dealt with through the modification process. The timing of when modification requests can be dealt with for Gate 3 projects is covered under the Commission's Gate 3 decision paper⁶, while detail on pre-conditions to making the change and details on why a specific alternative might not be accommodated by the System Operators is provided in the Joint TSO-DSO Group Processing Approach Pricing Principles Guidelines¹⁰.

The response provided by the TSO covers this off from a transmission perspective.

2.2.7 Point #7: Civil works

IWEA & Synergy's original issue

The IWEA & Synergy stated that the Customer should have the option to carry out or procure the carrying out of any civils work elements itself. The connection agreements should provide for this.

TSO response

The TSO responded to state that connecting parties already have the option of carrying out certain civil works. It also highlighted that it is open to discussing this issue further to more fully understand the issue being raised.

Commission position

The situations for typical scenarios regarding the completion of civil works by developers are provided below:

Distribution civil works – Where civil works relate to connection assets used by an individual windfarm, then that developer is allowed under current connection policy to complete distribution civil works. These works would be undertaken under contract to ESB Networks and, since the cost would be passed on to that developer by ESB Networks, this could result in a financial benefit to the developer. In addition, the Commission is currently consulting on the DSO's proposals for facilitating contestable connections to the distribution electricity network. This is likely to provide the developer with another option regarding its completion of distribution civil works. Paragraph 2.2.25 provides further information regarding the introduction of contestability for parties connecting to the distribution system.

Transmission civil works – Transmission connected developers can complete transmission civil works via contestability.

¹⁰ The Joint TSO-DSO Group Processing Approach Pricing Principles Guidelines is available [here](#). Note that this document is currently being revised, primarily to introduce more clarity. The version that is currently being consulted on (CER/09/137) is available [here](#).

Transmission civil works – Distribution or transmission connected developers can under current connection policy complete transmission civil works under tender to ESB Networks.

Agreement regarding completion of civil works – In addition, to cater for civil works for assets shared by one or more wind farms, the DSO has developed a process whereby, provided all developers sharing a station asset advise their agreement in writing, a distribution connected developer can undertake the civil work for the station in question, subject to the oversight of ESB Networks. This will also be accommodated in instances where distribution parties undertake the civil works for transmission assets, subject to the TSO's outline requirements being met through the DSO contract with customers.

2.2.8 Point #8: Timetables

IWEA & Synergy's original issue

The IWEA & Synergy stated that:

- Following the Consents Issue Date (and as a pre-condition to the Customer making the pre-construction stage payment) EirGrid/ESBN should provide a detailed programme (in Gantt chart or similar format) setting out the work-streams and the critical path to achieving the connection works completion date and operational date.
- Together with the programme (and as a pre-condition to the Customer making the pre-construction stage payment) EirGrid/ESBN should provide a list of all equipment required for the Company's Connection Works. The order dates and delivery periods for all required Company equipment should be detailed in the programme.
- The programme should also include a period for the performance of commissioning tests.
- An outline programme should be provided with quotation/offer letter, which programme will then be updated following the Consents Issue Date.
- The programme must be reasonable, appropriate and specific to the connection method and should not include inflated or unrealistic time periods.

DSO response

The DSO proposed that:

- As part of the connection offer the developer would be provided with an outline programme (in Gantt chart format) setting out the workstreams and the critical path to achieving the Consents Issue Date⁹, Connection Works Completion Date and Operational Date.
- After acceptance of the offer the developer will be contacted and provided with information on when the various elements of the pre-deliverable process will be completed. This will include information on delivery time for items with long lead times.

- Prior to the developer making the second stage payment ESB Networks would arrange a kick-off meeting with the developer at which an updated construction programme, taking into account of the most up to date information available at the time, will be outlined.

TSO response

The TSO noted that in accordance with clause 2.7.4 of Schedule 10 of the Transmission Connection Agreement, it is obliged to provide the connecting party (and vice versa) with a programme for the design, construction, commissioning and testing for its connection works within 30 business days of the Consents Issue Date (CID).

Commission position

The issues raised above have been covered off from a transmission perspective by the response provided by the TSO. Similarly the response provided by the DSO also covers off most items for distribution connecting parties.

The Commission expects that the programmes provided should include a timeframe for the completion of commissioning tests.

The programme to be provided to the developer is discussed in further detail within Section 4.0 of this paper which discusses the introduction of certainty on delivery times to the connection contracts. However, it should be stated here that while the updated programme provided at the pre-construction phase may be specific to an individual project, it is not envisaged that the programme provided at the offer stage would be specific to an individual project; it would be based on the average timelines.

2.2.9 Point #9: Acceleration of programme

IWEA & Synergy's original issue

The IWEA & Synergy stated that the connection agreement should contain a provision whereby the Customer can request EirGrid/ESBN to accelerate the programme where there is a delay in the programme, including placing orders for material or equipment. The Customer will take the risk on any additional costs arising as a result of accelerating the programme provided that the Company has not been the cause of the delay.

DSO response

The DSO proposed that on acceptance of the connection offer information would be provided to the developer on the delivery of the programme. This would include information on delivery times on long lead items. The DSO has also confirmed that it currently accommodates the above request. That is, once planning permission has been lodged or obtained, if the delivery time for an item is on the critical path and the developer requests that this item be ordered earlier, the DSO currently accommodates this request where possible.

TSO response

The TSO responded to state that transmission connecting parties can request that it advance certain matters (for example, placing orders for equipment) subject to the connecting party accepting the risk on additional costs, etc.

Commission position

The responses by the DSO and the TSO cover off this issue.

2.2.10 Point #10: Certainty re programme

IWEA & Synergy's original issue

The IWEA & Synergy stated that the connection agreement needed to contain an incentive mechanism to ensure completion and energisation of the Company's Connection Works in accordance with the programme with appropriate remedies against EirGrid/ESBN for failing to meet the programme for matters within its control.

TSO response

The TSO responded to state that, in general, it is supportive of well designed incentive mechanisms which suitably balance risk and reward and recognise the degree to which the matters being incentivised are under its control.

Commission position

This issue is discussed further in Section 4.0 of this paper.

2.2.11 Point #11: Cost certainty

IWEA & Synergy's original issue

The IWEA & Synergy stated that:

- The list of Pass-Through Costs needs to be clearly defined.
- Even though these costs are by their nature Pass-Through-Costs, a reasonably accurate estimate of the costs must be provided in the quotation/offer letter.
- The costs should then be firmed up within a defined period following the Consents Issue Date (and as a pre-condition to the Customer making the pre-construction stage payment).
- The process for passing through these costs should be transparent and drafted in clearly defined terms in the connection agreements.
- It is expected that the provisions of the Commission's Decision 05/090 relating to Pass-Through Costs would be reflected/re-iterated in the terms of the connection agreements (which is currently not the case).
- As requested in a recent meeting, reports are required from EirGrid and ESBN detailing when Pass-Through Costs can first be estimated (and with what degree of detail) and then firmed up. Also as requested in a recent meeting, the IWEA & Synergy will require EirGrid and ESBN to report on

- what additional works (for example surveys) would need to be carried out by them pre-connection offer in order to provide an accurate estimate of Pass-Through Costs at offer stage and Consent Issue Date stage and what impact (if any) these would have on the cost and timing of issuing connection offers.
- Related to this point is to what extent provision is already made in the connection offer applications fees for these surveys and works. They stated that they awaited receipt of these reports and would welcome the Commission's input in terms of verifying EirGrid/ESBN's costs and timelines and the degree of work required from EirGrid/ESBN at pre-offer and pre-construction stage. They also requested an agreed cap on Pass-Through Costs (other than Pass Through Costs of consents).

DSO response

The DSO proposed that additional estimates would be introduced into the process at the offer stage. The DSO did however note that pass-through costs are by definition costs that cannot be exactly determined in advance and that the group processing approach by necessity requires offers to be prepared as quickly as possible using primarily desktop analysis and high-level site visit information.

The DSO made the following proposals regarding the provision of estimates of pass-through costs at the offer stage:

1. **Civil works costs for stations and cables.**
An estimate of the civil works costs associated with the station elements assuming 'normal site conditions' could be provided. It would not be possible to provide an estimate on a site by site basis as this would involve a full site survey and at the offer stage a site has not been finalised. DSO policy is that IWEA & Synergy can perform the civil works for cables and therefore it will be the developer's responsibility to determine its own estimate of such costs.
2. **110kV cable costs greater than 1km in length**
Given that DSO goes out to tender for this element of work the best estimate that IWEA & Synergy should use is the standard charge approved by CER for 1km 110kV cable by the quoted volume.
3. **Site purchase costs**
A final site is not decided upon until a much later stage in the process. Therefore, DSO proposes to provide the developer with the site dimensions which the developer could then use in conjunction with their local knowledge of the area to estimate the site purchase costs particular to their connection.
4. **Need for temporary transformer where up-rating taking place**

DSO proposes to develop a set of costs for each type of possible up-rating. The appropriate figure can then be included at the offer stage on a case by case basis.

5. EirGrid pass-through costs – planning permission and wayleaving transmission element
These costs are provided by the TSO.
6. Wayleaves and consents outside that included in offer
With respect to this issue it is impossible for DSO to give any indication of the costs that may be incurred due to wayleaving/easement/access issues. Experience to date indicates that these costs can vary widely by project/voltage level and county.
7. Forestry compensation
DSO proposes to include an estimate of these costs in the offer based on current agreements with Coillte and the initial high-level site visit that will be performed at the offer stage.
8. Access for delivery of materials due to bad terrain, for example, helicopter drops, etc.
Such costs are considered to arise only on rare occasions and as such cannot be forecasted/estimated in advance. Therefore, DSO proposes not to include an estimate in the offer for such costs.
9. Planning permission changes and conditions imposed
These items only arise after the offer stage and therefore no estimate can be included in the offer.
10. Lock out costs
These items only arise after the offer stage and therefore no estimate can be included in the offer.
11. Volume changes
These items only arise after the offer stage and therefore no estimate can be included in the offer.

TSO response

The TSO responded to state that estimates of the quantities of pass through costs are provided in its standard connection offer, that is, line length, Grid Code/commissioning testing (TSO) mandays and project management fees/mandays (for contestable offers). The actual costs incurred can be discussed as part of the regular project meetings.

The TSO also highlighted within its consultation response that at transmission level the majority of costs have been determined on a fixed price basis, even where there has been some degree of uncertainty or variability as to their outturn

or where they may be site specific. The degree of cost certainty going forward was the subject of a recent separate Commission consultation on standard charges for transmission connection⁷. While recognising that is a balance between cost reflectivity and certainty, the TSO support the introduction and retention of standard charges where possible.

Commission position

The above proposals by the DSO provide detail on the level of information it can provide on pass-through-costs at the offer stage. Similarly the TSO's response documents the information that it already provides on pass-through costs at the offer stage. The Commission agrees that the nature of pass-through-costs and the requirements of the Group Processing Approach mean that firm costs cannot be provided for all of these costs at the offer stage.

In the proposed decision paper the Commission stated that prior to the pre-construction phase payment it expected that all pass-through-costs would be tied down, and intended that this would either be through the provision of a firm cost where this was available or, where this was not possible, by tying these down through a schedule of rates. However, following further discussions with the DSO it has become evident that this may not be possible for all costs. The DSO has indicated that site purchase costs and the cost/need for a temporary transformer can be firmed up prior to the pre-construction phase payment. The remaining items are currently being discussed between the DSO and the Commission.

2.2.12 Point #12: Assumptions

IWEA & Synergy's original issue

The IWEA & Synergy stated that the quotation/offer letters currently include a long list of assumptions, any change in which may result in a change in the connection charge. Many of the assumptions are drafted in a vague and open ended manner leading to ambiguity and uncertainty as to their scope and consequences. For example:

- DSO Quotation Letter Clause 12.10 (Line or Cable Route and Grounds Conditions): There is no definition provided as to what might constitute "reasonable line or cable routes and ground conditions". A definition of what constitutes "reasonable ground conditions" is given in the TSO Offer Letter (clause 3.5) but not in the DSO Quotation Letter.
- DSO Quotation Letter Clause 12.11 and TSO Offer Letter Clause 3.9 (Delivery Dates): "The delivery/availability of all [items of plant and] materials [will be within] current standard delivery periods". There is also additional "endeavour" and "as expeditiously as possible" language in DSO Clause 12.11. If reasonable and considered periods are included in the programme reflecting the estimated current delivery periods for the relevant items of equipment etc required and ESNB/EirGrid place the orders in line with the programme, then this risk is within ESNB/EirGrid

- control (save perhaps in exceptional circumstances, for example, Force Majeure). As with any contract, a default of a subcontractor does not relieve the principal contractor of his obligations. This is particularly important with recent increases in transformer delivery times. A number of developers have experienced delay here.
- TSO Quotation Letter Clause 3.11 (Weather Conditions): There is a reference to “adverse environmental and weather conditions”. These need to be defined.
 - TSO Quotation Letter Clause 3.10 (Changes in Construction, Access and Commissioning Dates and Periods): ‘The dates and periods in Appendix 1 remain as set out’. Other than the Consents Issue Date these dates are within ESN/EirGrid control.

The IWEA & Synergy stated that each of the Assumptions needs to be eliminated or clearly defined with EirGrid/ESBN. The consequences of each Assumption arising must be clearly stated and defined in the connection agreements.

DSO response

The DSO has provided proposals for the revision of its connection documents to allow for the above points. These detailed wording of these changes will be examined as part of any redrafting of connection contracts that will be required to implement decisions from this consultation process¹¹.

TSO response

The TSO stated that it is looking at this issue further and would propose revised wording in due course. Following on from that statement the TSO provided revised wording within its document that was published as part of the previous consultation on this matter¹.

Commission position

Both the TSO and the DSO have provided responses to the above points and proposed to redraft elements of the contract to accommodate those points. As detailed above, the TSO’s revised wording was published as part of a previous consultation on this matter. The Commission is satisfied that the TSO’s contracts should be modified to reflect these amendments.

Revised contracts proposed by the DSO will shortly be consulted on by the Commission and interested parties will have the opportunity to comment on those proposed contracts prior to their finalisation¹¹.

¹¹ Note – While some redrafting of the contracts will be required in any event following the outcome of this process, if merely to accommodate the above assumptions, other decisions made through this process (for example, relating to certainty on timelines) may be captured within connection policy rather than within the connection contracts. This alternative, that is, capturing the detail of any changes within connection policy rather than within the contracts, could be beneficial in ensuring the timely implementation of any decision prior to the issuance of Gate 3 offers. The impact of those decisions would be the same regardless of whether they were captured within the policy or the contracts.

The TSO has also indicated that it intends to bring forward further suggestions for improvements to its contracts; it is intended that these will be consulted on at a later date.

2.2.13 Point #13: Termination

IWEA & Synergy's original issue – Part A

The IWEA & Synergy stated that there needs to be greater clarity in the provisions of the connection agreements that deal with the grounds for and consequences of termination. For example, the Company should not have the right to terminate the Connection Agreement where the Operational Date has not occurred by the Scheduled Operational Longstop Date due to the Company's default.

DSO response – Part A

In Section 5.1 of the DSO's response the DSO proposed to modify clause 17 of the quotation letter to reflect the fact that DSO's right to terminate would not include the case where it was due to its own default.

Commission position – Part A

The implementation of this proposal will cover off this item. The detail of how the DSO will modify clause 17 to reflect this change was provided within the DSO's response¹ to the original issues raised by the IWEA & Synergy, but the Commission does not intend to comment on this level of detail at this time.

Instead it is appropriate that this be covered off as part of the redrafting of connection contracts that will be required to implement decisions from this consultation process¹¹. A consultation on these contracts will be issued shortly.

IWEA & Synergy's original issue – Part B

The IWEA & Synergy stated that it is not clear why the Company should have an immediate right to terminate where the Customer does not have a supply agreement in place.

DSO – Part B

The DSO clarified that the right to terminate where there is no supply agreement in place is in fact a market requirement and therefore it is not within DSO's control to propose an amendment to this provision¹².

Commission position – Part B

As stated above by the DSO, it is a market requirement that a supply agreement be in place. One reason behind this requirement is that in addition to having the ability to generate electricity the developers' sites will also have the ability to

¹² This information was provided at a meeting between the IWEA & Synergy, the System Operators and the Commission.

consume electricity from the grid. If a valid supply agreement was not in place the developer could potentially consume electricity without being charged. Hence this requirement is in place and this decision paper will not impact on that requirement¹³.

IWEA & Synergy's original issue – Part C

The IWEA & Synergy stated that the mechanism for refunding the connection charge less any costs incurred by EirGrid/ESBN needs to be clarified.

Commission position – Part C

The current connection contracts state that in general the 10% payment is non-fundable, but if the connection does not proceed solely as a result of the necessary consents or planning permission not being obtained, the balance of the 10% paid to the DSO that has not been incurred by the DSO on progressing the application will be refunded to the customer.

It should be noted that the Commission's decision within this paper in relation to the capacity bond makes the initial payment non refundable. Section 5.0 provides detail on this decision.

TSO response

The TSO responded on this point as a whole to state that it is agreeable to reviewing the termination provisions to ensure additional clarity for both contracting parties. Following on from that statement it also provided revised wording within its document that was published as part of the previous consultation on this matter¹.

2.2.14 Point #14: Non-acceptance of offers

IWEA & Synergy's original issue

A number of separate points were made by the IWEA & Synergy under this heading. Each of these has been outlined and responded to in turn below.

IWEA & Synergy's original issue – Part A

The IWEA & Synergy stated that there is insufficient detail in the connection agreements with respect to the consequences for the developer where an interacting offer is not accepted or is withdrawn after it has been accepted.

Commission response – Part A

It is true that the connection agreements do not detail the consequences for developers where an interacting offer is not accepted or is withdrawn after it has

¹³ TSO has held initial discussions with the Commission on, and is currently drafting, a TUoS agreement for distribution connected generators to cover charges on exported energy. It is proposed that the requirement for a generator to have concluded a TUoS agreement for exported energy would be added to the Connection Agreement.

been accepted. However, these details are covered in Section 4 of the 'Joint TSO/DSO Group Processing Approach Pricing Principles Guidelines paper'¹⁰.

The Commission does not see a necessity for these details to also be documented within the connection contracts. Therefore, no further action will be taken on this point.

IWEA & Synergy's original issue – Part B

The IWEA & Synergy stated that in general the group processing model of shared assets (which are in reality network assets) is problematic.

Commission response – Part B

The Commission accepts there are challenges associated with the Group Processing Approach, as there would be with any policy for the connection of generators, but these challenges are outweighed by the benefits of the Group Processing Approach.

IWEA & Synergy's original issue – Part C

The IWEA & Synergy stated that the current system whereby interacting offers which are either not accepted or are withdrawn result in no increased charges for the remaining group members, while in theory seems beneficial, in practice results in a great degree of delay and uncertainty for developers. Furthermore the "no increased charges" principle does not deal with delay cost suffered by the developer.

Commission response – Part C

The Commission accepts that there are benefits and disadvantages associated with the current system. One benefit for connecting parties is that, in the event that one connecting party drops out, the remaining subgroup members are guaranteed that the cost of their connection assets will not increase. This is true even if the connection assets would have been required in any event to facilitate connection of the remaining group members. Instead the Use of System customer covers any unmet costs. If the connection method can be optimised to suit the remaining developers, they will then receive a lower connection cost.

However, if a developer drops out and the connection method is optimised to cater for the needs of the remaining generators then this will cause an inevitable delay (assuming the construction timelines are not decreased by the optimisation of the assets required to connect the subgroup). This is one of the disadvantages of the Group Processing Approach, but it cannot be avoided as the alternative would be to progress in all cases with the construction of assets that may or may not be required and to require that the Use of System customer cover the costs of those assets in all instances.

IWEA & Synergy's original issue – Part D

The IWEA & Synergy stated that appropriate provisions should be included in the connection agreements to allow for, at a minimum, a fast track process and a longstop date for the issue of any modified offer.

Commission response

The Commission's Gate 3 decision paper⁶ stated that complex modification requests to Gate 3 offers should generally be processed after all Gate 3 offers have been issued. This decision was made in order to prevent the delay of the Gate 3 offer programme. More simple modifications would be accommodated at an earlier stage where the processing of such modifications will not delay the issuance of subsequent Gate 3 offers.

Similarly, providing a fast-track process for the optimisation of connection offers in instances where a developer drops out would also have the potential to delay the roll-out of Gate 3 offers. Consequently, the Commission is of the view that a similar approach should be taken in these instances. That is, complex optimisations should be processed after all Gate 3 offers have been issued, while more simple optimisations should be accommodated at an earlier stage.

IWEA & Synergy's original issue – Part E

The IWEA & Synergy stated that a defined scope of work should be advanced prior to offer acceptance by the entire sub-group.

Commission response

Prior to issuing all offers the System Operators undertake the work required for the development of those offers (and will also undertake the work required to provide information at offer acceptance stage as detailed in the DSO's proposal document¹). Requiring the System Operators to complete further work based on an assumption of which developers would accept the offers would cause the System Operators to waste resources on the development of connections for some parties that would not progress with their connections. Therefore, no further action will be taken on this point.

2.2.15 Point #15: Rebates

IWEA & Synergy's original issue

The IWEA & Synergy stated that the connection agreements do not include express provisions for rebates to the Customer for later connections to the constructed assets¹⁴. They wish to explore drafting solutions with EirGrid/ESBN for the inclusion of appropriate provisions in the connection agreements. In

¹⁴ These rebates relate to a situation where a developer pays for the construction of a shallow connection asset which is required to accommodate their MEC, but which also provides some unutilised capacity and another developer subsequently connects and uses that spare capacity. In such a scenario the original developer is provided with a rebate relating to the payment they originally provided for that asset.

particular the following principles need to be incorporated into the connection agreements:

- A. The ten year rebate rule should be extended closer to 50 years as this is the typical design life of the assets;
- B. The rebate should be calculated on the basis of the connecting party's per MW share of the present day cost of constructing the asset (that is, at the time of connection) and not the depreciated historical cost;
- C. Where the later connection is made to an underground cable constructed at the cost of a developer the actual cost of construction should be the basis of the rebate rather than the LCTA; and,
- D. There should be a rebate to the Customer where the connection method results in previously installed equipment with a residual value being re-used by the system operator elsewhere.

The IWEA & Synergy stated that these comments should be considered by the Commission as a submission on the rebates issue included in Consultation Paper CER/08/017¹⁵.

TSO response

The TSO stated that it is open to looking at the 10 year rebate rule (ref. points A. and B.). However, whatever set of connection pricing policies is adopted should be internally consistent. Points A and B as currently proposed are not and would imply significant rebates be payable for fully written down assets.

Ref. point C, the TSO believes that rebates should be on the basis of LCTA. For those situations where the original LCTA proposal is overhead and the process of securing an overhead route has been exhausted without success and as a result securing a viable overhead is deemed not to be viable, then the underground connection would become the LCTA and the connection agreement would be modified accordingly.

Ref. point D, the TSO agrees in principle subject to more detailed rules being developed to determine the appropriate rebate payable.

Commission position

The Commission has requested that the System Operators consider points A and B when revising their charging methodologies. This process is currently in progress and the Commission has recently published a consultation on this matter¹⁰. For point C, this comment was considered by the Commission as a submission in response to the Commission's consultation paper CER/08/017, insofar as it related to distribution assets. The subsequent decision paper was published in May 2008¹⁶. It was decided that in the scenario outlined by the developer, the rebate would be, as requested above, on the basis of the actual cost of construction rather than the LCTA. That decision related to distribution,

¹⁵ The DSO's Proposals on LCTA Rebates and Fees, CER/08/017 is available [here](#).

¹⁶ Decision Paper on DSO Proposals on LCTA Rebates and Fees, CER/08/077 is available [here](#).

however, the TSO is also considering Point C as part of its deliberations on Points A and B.

For point D, the request outlined above is consistent with the DSO's current connection policies.

2.2.16 Point #16: Payment of charges

IWEA & Synergy's original issue

The IWEA & Synergy stated that the connection agreements should make provision for retention of an agreed percentage of the connection charge until after energisation has been completed and the operational date confirmed.

DSO response

The DSO proposed revising the payment schedule so that 10% of the connection charges together with any outstanding pass-through costs would be payable one calendar month after the operational date. As part of this proposal, and to ensure payment of the final 10%, receipt of the final payment would trigger the passing on of export data to MRSO for aggregation.

In its proposed decision the Commission proposed to endorse the above proposal by the DSO. However, the DSO subsequently reverted to state that it recently became aware of a Trading and Settlement Code modification which meant that payment to generators for export could no longer be linked to a post-energisation final stage payment. Therefore, the risk of connecting parties defaulting on the final stage payment would be increased. The DSO stated that it may be appropriate to revert to final payment pre-energisation.

TSO response

The TSO stated that the current connection charge payment schedule is designed to reflect the spend profile.

Commission position

In the proposed decision the Commission proposed that it would endorse the original proposal made by the DSO. However, given that the DSO has clarified that a post-energisation payment by connecting parties cannot be linked to payment to generators for export, the proposal for the final stage payment to be post-energisation would increase the risk of defaulting parties. This in turn raises the possibility that the Use of System customer would be required to carry the risk associated with non payment of the connecting parties connection costs.

Therefore, the Commission has modified its position on this relative to the proposed decision paper, and has decided that the final stage payment should remain at its current position (that is, pre-energisation). The final stage payment should remain at its current position for both distribution and transmission connections.

2.2.17 Point #17: Commissioning

IWEA & Synergy's original issue

The IWEA & Synergy stated that ESNB should make a tester available for carrying out the G10 commissioning tests within one week of request by the Customer. Where ESNB fails to do so the Customer should be entitled to procure an approved independent third party to carry out the G10 tests at ESNB's cost (with the amount being deducted from the retention monies).

DSO response

The DSO did not agree to the above timeline, but instead suggested that the developer should provide four weeks' notice of the date on which its project will be ready for G10 testing and notify the week the testing is to occur.

The DSO also stated that it has access to a significant and adequate commissioning resource and that in the absence of the resource typically deployed on G10 testing, other commissioning resources can be redeployed to carry out the required tests. It also highlighted that the completion of projects on time and to specification contributes to the effective deployment and scheduling of the commissioning resource. For example, should a developer discover they are not ready for G10 testing then – by advising ESB Networks in time – the affected commissioning resource can be re-deployed ensuring that they can be utilised for another project.

TSO response

The TSO responded to state that insofar as the comment raised relates to ESB Networks and therefore distribution connections that this is an ESB Networks issue. The TSO supported the DSO's proposals of adequate notification by developers and the need to make efficient use of commissioning resources.

Commission position

The Commission is satisfied that the proposal put forward by the DSO allows a sensible timeframe for the agreement of a date for commissioning of the project.

2.2.18 Point #18: Grid Code testing

IWEA & Synergy's original issue

The IWEA & Synergy stated that the current requirements for Grid Code testing are proving very difficult to schedule due to the amount of variables involved. For example, the requirement that there must be a minimum level of wind on the system and that the project is operating at 75% output is outside of the Customer's control. They suggest that the bar be lowered to facilitate scheduling of the grid code tests to 50% output instead as it is more likely to satisfy the test conditions. They would wish to discuss changes to the requirements with EirGrid.

TSO response

The TSO responded to confirm that the statement that “there must be a minimum level of wind on the system” is in fact not true. Certain Grid Code tests do require a minimum level of output from the actual windfarm under test.

Commission position

The Grid Code details a process by which modifications to the Grid Code can be requested¹⁷ and, if the IWEA & Synergy deem it appropriate, the above suggestion should be progressed through that route. Given the existence of this process, no further action will be taken on this point as part of this examination of the connection contracts.

2.2.19 Point #19: Provision of information

IWEA & Synergy’s original issue

The IWEA & Synergy stated that EirGrid/ESBN should clearly define the information they require from the Customer at the connection offer stage. Any inadequacy in their list of requirements must be at EirGrid/ESBN’s risk.

DSO response

The DSO provides details of proposals on how it would interact with customers to share information. In addition to the provision of information by the DSO, these proposals also required the provision of information by customers at various stages of the project.

TSO response

The TSO responded to state that it would welcome clarity on the issue being raised.

Commission position

It does not seem practical, especially in light of the proposals made by the DSO, to require the System Operators to take the risk associated with any informational inadequacies. To do so may lead to the System Operators requesting more extensive information at the application stage, some of which may be required only in exceptional cases. In addition, it would likely lead to the rejection of all applications where any information (regardless of whether it would only be required in exceptional cases) was incomplete or slightly inaccurate. Instead it seems sensible that the System Operators and the developer would work together such that information is compiled in a timely manner to allow the project to progress. The Commission agrees that the System Operators should inform the developers in a timely manner regarding the information that would be required from them.

2.2.20 Point #20: Sub-contracting

¹⁷ The Grid Code is available [here](#).

IWEA & Synergy's original issue

The IWEA & Synergy stated that where EirGrid/ESBN sub-contracts any part of the works, supplies or services which are necessary for the performance of the Company Connection Works (including, for the avoidance of doubt, project management and other consultant services) such subcontracts should be procured through public tender processes in compliance with national and EU procurement rules.

ESB Networks response

ESB Networks has confirmed that it is fully aware of and is fully compliant with its legal obligations under Directive 2004/17/EC. In relation to the Government Guidelines, it is assumed this is a reference to the State Body Guidelines which were superseded in 2001 by the Code of Practice on Governance of State Bodies. This Code does not impose mandatory competitive tendering on ESB and in any event policing ESB's implementation of the Code is not a matter for any third party.

TSO response

The TSO responded to state that it intends that all outsourced services will be competitively procured in the future.

Commission response

The Commission is not aware of any non-compliance by ESB Networks under the national or EU procurement rules. The Commission's understanding of the background to this issue is the use of ESBI by ESB Networks for technical consultancy work in the provision of the shallow connection. The concern is that ESB Networks is avoiding the regulation of its costs by sub-contracting the work to an unregulated subsidiary company. The Commission is aware of this concern. In reviewing the standard charges for connection works the Commission reviewed the costs and the level of work sub-contracted to ESBI. The Commission has determined that the costs provided in the standard connection charges are reasonable. The Commission understands that the TSO tenders for technical consultants.

2.2.21 Point #21: Provision of information**IWEA & Synergy's original issue**

The IWEA & Synergy stated that EirGrid/ESBN must ensure that all necessary internal approvals required in order for it to proceed with capital works or the order of material are obtained in good time to ensure compliance with the programme. Any such internal approvals and necessary timelines for obtaining them should be included in the programme.

DSO response

The DSO proposed providing a programme with the connection offer, which would be updated at the 55% stage, setting out the work-streams and the critical

path to achieving the Connection Works, Completion Date and the Operational Date.

The DSO also proposed that on acceptance of the connection offer a Project Leader will contact the developer and provide information on the delivery of the programme. This would include information on when the various elements of the pre-deliverable process will be completed including information relating to delivery times on long lead items.

TSO response

The TSO responded to state that it agreed in principle with the IWEA & Synergy's points.

Commission response

The above responses cover off this issue.

2.2.22 Point #22: Deemed firm date

IWEA & Synergy's original issue

The IWEA & Synergy stated that a Deemed Firm Date needs to be included in the connection agreements. With increasing constraints projected on the system, non-firm access will become an increasing problem and will ultimately impact on the bankability of a project without a mechanism such as a Deemed Firm Date and guaranteed firm financial access being incorporated.

TSO response

The TSO responded to state that this is a matter for the Commission.

Commission response

This matter is currently being consulted on by the Commission as part of a consultation on the access/dispatch rules for the SEM¹⁸.

2.2.23 Point #23: Constraints

IWEA & Synergy's original issue

The IWEA & Synergy stated that there is uncertainty regarding the current mechanism of non-firm access contained in the connection agreements. For example, there is no clarity on whether the developer would receive compensation in the following circumstances:

- A. Where the developer is constrained in excess of what was estimated in the constraint report; and,
- B. If the Deep Operational Date is not achieved by the date stated in the connection offer.

These matters need to be resolved.

¹⁸ A consultation paper on the principles of dispatch and the design of the market schedule in the TSC (SEM-09-073) is available [here](#).

Commission response

The connection offer provided to a party under the GPA provides an indicative energisation date and an indicative 'Deep Operational Date'¹⁹. The party also receives an estimate (a constraints report) of the amount by which its output could be reduced due to system constraints between those two indicative dates.

However, the report is an estimate and the dates provided are indicative. No compensation is paid to the party for reductions to its output until after its Deep Operational date (that is, the actual rather than the indicative date) has been met.

While this is not detailed within the connection contracts, the principle that a generator would not receive compensation for its output being reduced until its associated deep reinforcements (as set out in the connection agreement or as amended) are complete is documented within the Commission's and NIAUR's High Level Decision Paper on SEM design²⁰. This was subject to a public consultation prior to finalisation of that document.

Following on from that, a Commission direction relating to Gate 2²¹ clarified that the TSO would provide an estimate of the likely incidence of constraining off the generator's output from the date of commissioning until all necessary transmission reinforcement works are expected to be completed. This will also be the case for offers issued under Gate 3²².

2.2.24 Point #24: Contestability

IWEA & Synergy's original issue

The IWEA & Synergy stated that the current policy with regard to contestability of shared transmission connection assets whereby all applicants – transmission and distribution – sharing the transmission asset within a sub-group must come to a unanimous agreement amongst themselves that they wish to make the shared transmission connection asset contestable is problematic. It can result in unfair leverage being exerted within the group. They wish to explore solutions with EirGrid/ESBN for a change to this policy, for example, that a qualified majority based on MW replace the requirement for a unanimous agreement and that those who do not agree to the assets being contestable be given offers based on the non-contestable price.

TSO response

¹⁹ This is the date by which the generation plant's associated deep reinforcements (as set out in its connection agreement) are completed.

²⁰ The SEM high level design decision paper is available [here](#).

²¹ A decision on Gate 2 connection offers is available [here](#).

²² The Commission's decision (CER/08/260) on the criteria for Gate 3 generators and related matters is available [here](#)

The TSO responded to state that it is open to the proposed idea, but noted that it primarily a matter for the Commission.

Commission response

The Commission does not propose to remove the requirement for unanimous agreement as part of this examination of the connection contracts. At this stage no details have been provided on any workable solution regarding allowing contestability where there is not agreement between all parties within the group. EirGrid and the Commission are open to examining this rule at a later stage if detailed workable solutions are brought forward.

In addition, it should be noted that, as detailed below in Paragraph 2.2.25, the Commission is currently consulting on the DSO's proposals for facilitating contestable connections to the distribution electricity network; interested parties can provide comments as part of that process.

2.2.25 Point #25: Contestability

IWEA & Synergy's original issue

The IWEA & Synergy stated that bringing in contestability at 38kV and 20kV would go a long way to alleviating developer's concerns regarding distribution system connection offers as many of the time and cost risks currently sitting wholly with distribution system connected developers could be passed through to the connection works contractor which is currently not the case with the ESNB/EirGrid works. They noted that the Commission and ESNB both supported contestability of distribution system connections during recent meetings. They stated that they intended to escalate their lobbying of the Minister to introduce this on a legislative basis as a priority. Synergy stated that they wrote to the Minister on 21 February 2008 calling on him to make connection to the distribution system for renewable generators contestable and urging him to propose the immediate adoption of legislation transposing fully Directive 2001/77/EC²³.

TSO response

The TSO provided no comment on this point.

Commission response

In its proposed decision on connection policy, the Commission stated that it also supported the introduction of legislation to allow the contestability for connections to the distribution system and had written to the Minister to highlight this support. The Commission had also at that stage asked the DSO to begin preparatory work for the implementation of this legislation.

²³ Directive of the European Parliament and of the Council of 27 September on the promotion of electricity produced from renewable energy sources in the internal electricity market.

Work on the introduction of contestability for distribution connections has been progressing in parallel with this consultation on connection policy. New legislation (SI226 of 2009) was introduced by the Minister for Communications, Energy & Natural Resources in June 2009 which permits the option for a connecting party to arrange the construction of its connection to the system. The Commission is currently consulting on DSO proposals regarding how it will process applications, offers and subsequent connection to the electricity system at distribution level on a contestable basis. Interested parties can submit comments as part of that process²⁴.

2.2.26 Point #26: Capacity bond

IWEA & Synergy's original issue

The IWEA & Synergy stated that the timing of the capacity bond is unreasonable (that is, as a pre-condition to offer acceptance). They queried why developers should be required to fund it at the offer acceptance stage. They noted that under Gate 1 the capacity bond was not required to be in place until prior to the Operational Date and stated that the connection agreements should be amended to require delivery of the capacity bond either as a pre-condition to the Operational Date or no earlier than the Consents Issue Date. They welcome the recent decision in respect of the obligation under transmission connections to provide the connection charges bond at the Consents Issue Date.

TSO response

The TSO responded to state that the purpose of the MEC Capacity Bond is twofold. Firstly, to act as a deterrent for parties to hoard capacity in the system and secondly to offset the risk (partly at least) of stranded (transmission deep) assets. A balance needs to be obtained between ensuring parties are discouraged from hoarding the limited system capacity, to the detriment of others, and limiting the risk of there being stranded transmission assets.

Commission response

This point is discussed in Section 5.0 of this decision paper.

2.2.27 Point #27: Use of System charges

IWEA & Synergy's original issue

The IWEA & Synergy stated that:

- It is not clear at all why developers should have to pay on-going service charges in addition to TUoS and DUoS charge. This is something they wish to have clarified.
- It is not clear why transmission offer service charges and distribution offer service charges vary to such a great extent.

TSO response

²⁴ The Commission's consultation paper on distribution contestability is available [here](#).

The TSO responded to clarify that on-going service charges are designed to recover the costs of operating and maintaining a party's shallow connection assets. TUoS charges are designed to recover the system assets costs plus the costs associated with running the transmission business (that is, the cost of both the TSO and TAO businesses). The TSO also noted that it is currently looking at the on-going services charge calculation methodology in conjunction with ESB Networks and the Commission.

Commission response

The following bullet points provide clarification to address the above query in relation to payment of on-going service charges and UoS charges:

- Generators that connect to the electricity network pay for the shallow connection assets required to connect them to the electricity network.
- If they are connected to the distribution network they are required to pay annual Operation and Maintenance charges relating to the shallow connection assets. For transmission connections, this charge is known as the on-going service charge. These charges cover the cost of operating and maintaining the shallow connection assets.
- Any TUoS/DUoS paid by the generator (or the generator's supplier) does not relate to those assets.
- All generators are currently liable to pay a TUoS charge. Currently all generators connected to the transmission system and all generators that have an MEC greater than 10MW pay a TUoS charge other than zero. In general, the TUoS tariff allows the TSO to recover the costs of transmission system. The TUoS tariff is calculated to recover 25% of the network related costs from generators, with the remaining 75% being recovered from demand customers. The specific TUoS tariff to be paid by generators is referred to as the generator capacity charge and is location dependent. Note that this does not relate to the shallow connection assets.
- Generators pay TUoS charges related to its maximum import capacity and on the quantity of electricity imported from the network.
- In addition, generators that are connected to the distribution system pay DUoS charges on the quantity of electricity imported²⁵.

The variance between transmission and distribution on-going service charges was also queried. The Commission believes that the basis of the on-going service charge, or operation and maintenance charge, for transmission and distribution connections is the same. However, it would be expected that the charges would be different given the different category of assets covered by each. Also, while distribution operation and maintenance charges have been consulted on and approved by the Commission²⁶, standard transmission on-

²⁵ Note – If the generator has not paid for 100% of its shallow connection assets it will be liable for other DUoS charges.

²⁶ ESB Networks' Standard Prices and Operation and Maintenance Charges and details of the consultation process by which they were approved are available [here](#).

going service charges have not been approved by the Commission. The TSO and ESB Networks have committed to putting in place standard charges. These will be subject to a separate consultation process, as part of which all parties will be invited to submit comments.

2.2.28 Point #28: Sub-station leases

IWEA & Synergy's original issue

The IWEA & Synergy stated that the obligation to grant freehold interests/100 year lease in the sub-station is unduly onerous and in most cases is legally impossible for the developer to comply with (for example where its interest in the site is based on a 30 year commercial lease). This requirement needs to be reviewed by EirGrid/ESBN.

DSO response

In its response document, the DSO proposed that the requirement for a freehold/leasehold of 100 years for the substation would remain in the connection agreement as this applies to all connections including demand. However, the following provision would be included in the quotation letter used for generator connections:

"Where the customer is unable to obtain a freehold interest in the substation site or a leasehold interest for a period greater than 100 years, the Company will consider a leasehold interest of less than 100 years on a case by case basis."

TSO response

Similarly, in its response document, the TSO proposed that the current requirement for a freehold or leasehold interest of minimum 100 years for those components of the connection works conveyed to ESB, as the TAO, would remain (cf. clause 5 in Schedule 10 of the Connection Agreement). However, the TSO would, on a case by case basis and in conjunction with the TAO, consider a leasehold of less than 100 years in cases where the customer is unable to obtain the required freehold or leasehold title of at least 100 years. This would also be governed by the TSO's obligation not to discriminate unfairly between customers.

Commission position

The proposal put forward by the DSO and the TSO accommodates the concerns raised by the IWEA & Synergy, by putting in place a mechanism by which developers can request that a leasehold of less than 100 years be accepted.

2.2.29 Point #29: Term of the agreement

IWEA & Synergy's original issue

The IWEA & Synergy stated that the term (that is, length) of the connection agreement needs to be considered. The initial term should match the lifecycle of the turbines and the agreement should be renewable upon the expiry of the initial

term at the Customer's option. This is also relevant to Point 15 above relating to rebates.

TSO response

The TSO stated that it is open to reviewing the term of the connection agreement and proposed that this matter be reviewed as part of any review on the rebating period.

Commission position

The System Operators and the Commission are currently discussing this issue and other matters relating to the term of the connection agreement. The Commission will deal with this issue as part of a separate consultation, after discussing the matter in detail with both System Operators.

2.2.30 Point #30: Loss Adjustment Factors

IWEA & Synergy's original issue

The IWEA & Synergy stated that consideration needs to be given to the risk of change in the project economics due to unforeseeable changes in TLAFs and DLAFs over the life of the project.

TSO response

The TSO originally responded to note that it was planning to perform some studies during the latter part of 2008 to assess the level of volatility associated with TLAFs and was open to looking at possible volatility techniques if the studies suggested these would be worthwhile. Since the provision of that response EirGrid and SONI published indicative TLAFs for 2011 and the process for wider consideration of the appropriate TLAF methodology has developed as detailed below.

Commission position

Regarding changes to Transmission Loss Adjustment Factors, the Commission and NIAUR recently published a document which committed to a review (by SONI and EirGrid) of the options and methodologies for deriving harmonised all-island Transmission Loss Adjustment Factors²⁷. This review is to take into account, among other things, the mitigation of year-on-year tariff volatility and/or unpredictability. SONI and EirGrid are to engage with industry as part of the review and develop a paper detailing their review for the Regulatory Authorities. This engagement is currently ongoing and is progressing independently to this consultation/decision on connection contracts.

Distribution Loss Adjustment Factors are based on the connection assets and the voltage to which the generator connects to the system. The values associated with the connection assets will not change unless the connection method

²⁷ The response paper (SEM-09-001) on All-Island transmission use of system charging and loss factors is available here.

changes. The values of the loss factor associated with the connection voltage level are subject to annual review. However, the changes to these loss factors are not significant and could not be described as volatile.

2.2.31 Point #31: Calculation of the LCTA

IWEA & Synergy's original issue

The IWEA & Synergy stated that changes to the basis for calculating LCTA are relevant to concerns regarding costs, and therefore to the principles outlined in this paper. They wanted to discuss the Commission's consultation paper 'DSO's Proposals on Least Cost Technically Acceptable criteria, Rebates and Fees' dated January 2008 (CER/08/017) and related DSO Proposals during the course of discussions on these principles.

Commission position

The Commission's consultation on this issue, which was independent of this current examination of the connection contracts, has since been finalised. All members of the public had the opportunity to provide responses to that consultation, and all responses were considered, prior to a decision²⁸ being made by the Commission. Some points made by the IWEA & Synergy as detailed above in Point 15 were also relevant to, and were therefore considered as part of, that process. None of the issues raised as part of this examination of connection contracts impact on the above decision.

2.2.32 Additional proposals by the TSO

The TSO provided some suggested improvements to the connection contracts that were not directly related to the issues raised by the IWEA & Synergy. In summary, these related to:

- Changes which result from a review of the insurance provisions of the Transmission Connection Agreement, which the TSO initiated at the latter part of 2007;
- The TSO's proposal to (a) integrate the general terms and conditions language from the Transmission Use of System Agreement (for Suppliers) and the Statement Of Charges into the General Conditions of Connection and Transmission Use of System and (b) introduce a specific TUoS agreement for distribution connected generators; and,
- A number of amendments resulting from experience gained by the TSO over the last number of years in processing connection applications and connecting customers to the transmission system.

Comments were invited on these as part of the consultation process, but no party responded on this matter. In the Commission's view these changes are sensible

²⁸ The Commission's decision paper entitled 'Decision Paper on LCTA calculations, Rebates and Fees' (CER/08/077) is available [here](#).

and should be implemented within the contracts for connection to the transmission system.

3.0 Further discussion on planning/design phase

3.1 Introduction

One of the IWEA & Synergy's issues relates to the pre-construction (or planning/design) phase of the project. This issue, which is as per point #3 as detailed in paragraph 2.2.3 above, is discussed in this section. The discussion takes the following format:

- Section 3.2 documents the IWEA & Synergy's initial issue;
- Section 3.3 documents the responses provided by the System Operators; (Both of the above are as per the documents published for consultation¹)
- Section 3.4 provides detail on the post-consultation meetings that were held with respondents; and,
- Section 3.5 provides the Commission's decision on this issue.

3.2 Initial issue re the planning/design phase

As detailed in Section 2.2.3 above, the IWEA & Synergy raised the following point in relation to the planning/design phase of the connection process. The IWEA & Synergy stated that:

- Following offer acceptance the System Operators should identify all landowners along the overhead line route.
- An agreed time period should be incorporated into the connection agreement for the System Operators to enter into agreements with landowners and other third parties along the overhead line route so as to secure all necessary wayleaves and third party consents.
- Where agreements have not been forthcoming from all landowners along the route within the specified time, a liaison mechanism should be incorporated into the connection agreement pursuant to which the Customer would have a number of options, including the option to request that the System Operators exercise their statutory powers to secure the consents and/or to proceed on the basis of the underground cable connection method.

3.3 System Operator responses

3.3.1 Response provided in relation to transmission connections

The TSO stated that its standard offer includes an estimate for the time required for securing consents. Its connection agreement also includes a contractual longstop date for securing the necessary consents. The TSO also highlighted that the option for parties to seek to modify the terms of their connection agreement, for example, to change from overhead to underground, exists already (cf. clause 21 of the Connection Agreement General Conditions). Finally, the

TSO noted that the contestability option available for transmission connecting parties means that a number of the issues raised can be the responsibility of the connecting party. The response provided by the TSO covers off some aspects of this issue from the perspective of transmission connections. However, some items remain such as the entering into agreements with landowners.

3.3.2 Initial DSO proposals provided pre-consultation

Following provision of the initial issues by the IWEA & Synergy the DSO provided a response document, elements of which are particularly relevant to the above point (that is, the planning/design phase of the project)¹.

In Section 3 of that document, the DSO stated that currently the majority of consultation with landowners regarding wayleaving and consents takes place once planning permission has been secured. However, to address the IWEA & Synergy's concerns the DSO proposed the following high-level process, which allows for consultation, by both DSO and developers, with landowners along the indicative route prior to obtaining planning permission.

The general outlines of both the current process and DSO's proposal have been illustrated within this paper in Figures 3.1 and 3.2 respectively²⁹. The DSO's proposal is also described below.

Route selection and landowner consultation

The DSO proposed that this process would be undertaken in the following order:

- Route selection.
- Consultation with major stakeholders including County Planners, Department of Forestry, etc.
- Serve Survey Notice on relevant landowners³⁰.
- Meet with farming organisations, local community groups, etc.
- Interaction by developers with landowners.

The approach to serving of survey notices, wayleaves and consultation with landowners would be discussed with developers after offer acceptance.

Planning permission stage

The DSO proposed that this process would be undertaken in the following order:

- Prepare planning permission submission and EIS (if required).
- Planning appeal/award.

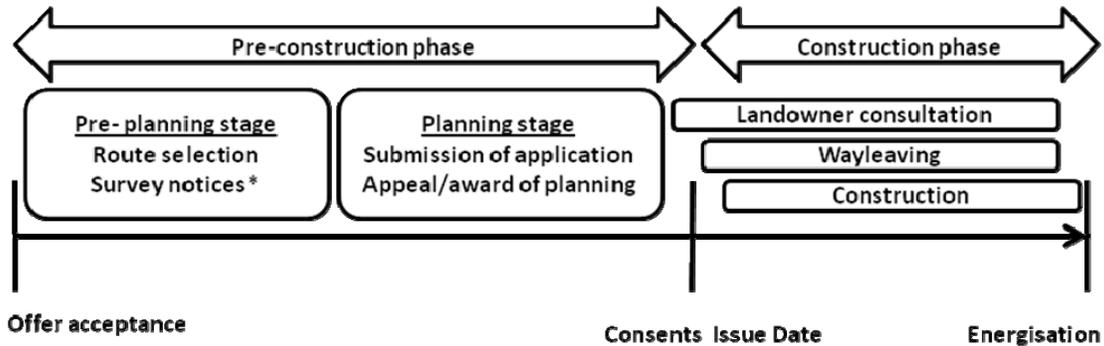
Detailed design based on planning permissions received

The DSO proposed that this process would be undertaken in the following order:

²⁹ The diagrams have been put together based on a typical case and there may be instances where it is deviated from for some projects.

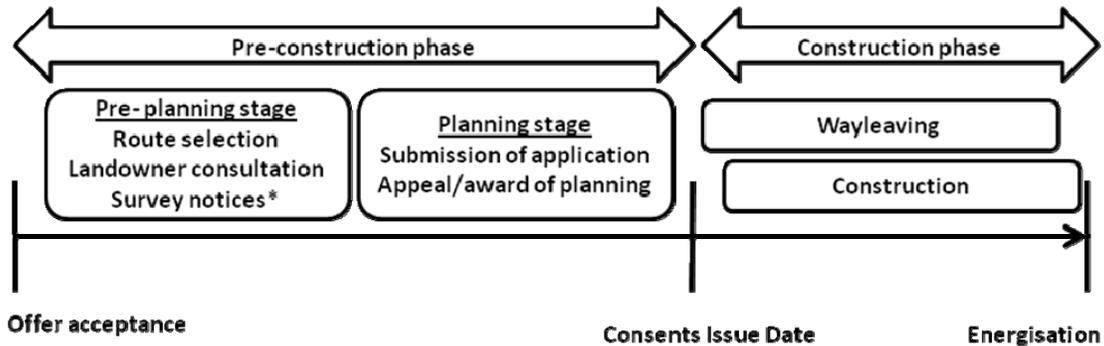
³⁰ Currently in some instances the DSO issue survey notices to landowners to state that they will enter their land with a view towards constructing assets for the transport of electricity. The DSO now proposes to issue these in all instances.

- Detailed survey of route.
- Detailed design of connection.
- Serve wayleaves on relevant landowners³¹.



*Survey notices are issued in some instances

Figure 3.1: Current process for delivery of connection assets



*Survey notices would be issued in all instances

Figure 3.2: DSO proposal for delivery of connection assets

3.3.3 Further clarifications provided by the DSO

The above proposals were published as part of the suite of documents that accompanied the initial consultation on this issue¹. Following on from the initial consultation the DSO provided further clarification on the process by which it serves wayleaves on landowners. It was highlighted that the wayleaving and construction processes are intimately linked as shown in the above figures. All necessary wayleaves are not obtained prior to the commencement of construction³². Instead the necessary wayleaving requirements for an assets, or section of asset, are finalised immediately prior to commencing construction of that asset, or section of asset.

³¹ Section 3.3.3 and footnotes number 31 & 32 of this document provides a relevant clarification in relation to the serving of wayleaves.

³² Prior to this clarification the Commission had believed (based on the statement within the current connection agreements that all necessary consents are obtained prior to the consents issue date) that all wayleaves were obtained prior to the initiation of construction.

The DSO believes that employing the above approach provides the best route to gaining access to land in order to construct assets. Obtaining wayleaves and constructing assets in quick succession assists in gaining the compliance of other landowners due to the urgency that is conveyed by the completion of assets on adjacent land. In addition, issues with a wayleave previously agreed only become evident when access is attempted.

The DSO also clarified the formal process by which it currently obtains a wayleave and moves towards the construction of assets. Based on its practical experience, the DSO did not propose to amend this process or change the time at which it is completed:

- The DSO issue a wayleave notice.
- If the landowner does not object to the wayleave notice the DSO enters the land to construct assets within a short time following serving of the wayleave.
- If the landowner does object, the DSO serves a time and date notice, detailing when it will enter the land to construct the assets. The DSO then enters the land to build the assets as per the time on the notice. The time between issue of the notice and the time specified for entering the land is relatively short. Again this conveys a sense of urgency that assists in gaining the compliance of the landowner.
- If the DSO is not permitted to access the land the DSO would then examine the option of exercising its statutory powers to gain access to the land.

Obviously there is significant discussion by the DSO with individual landowners, farming/local organisations and the local community before the formal process is initiated. The DSO feels that the process by which it issues wayleaves (followed quickly if needed by a time-and-date notice) in a relatively short time prior to entering the lands also conveys an urgency that aids in attaining the compliance of the landowner.

While the last resort of exercising its statutory powers would in theory progress any access issue without the compliance of landowners, the DSO feels that exercising that option as a default without ensuring that all other options have been explored would not facilitate the speedy construction of assets for both that developer and/or all developers in general.

3.4 Post-consultation meetings with respondents

Following on from the initial consultation, the Commission met with a number of respondents to discuss all aspects of the consultation. As part of these meetings

the arrangements for the planning/design phase of projects (both the current process and the DSO's proposals) were discussed³³.

A general summary of the current approach utilised by the DSO when obtaining planning permission is provided above in Figure 3.1, while the proposed new process is outlined above in Figure 3.2. The major difference is that the DSO proposed to consult with landowners in advance of the planning permission stage. This will allow the DSO and developers the option of moving the route if this is desired after initial consultation with landowners.

While the majority of parties were supportive of the DSO's proposal and all supported the increased level of communication with developers that is evident within this proposal, some parties requested that the DSO put signed agreements in place with landowners in advance of the application for planning permission. The DSO had previously indicated that requiring landowners to sign agreements at that stage of the process could do more harm than good and stated that in its opinion the current process, modified as per its above proposal, was the best path for obtaining all necessary consents for the construction of assets.

Where parties requested that the DSO put signed agreements in place in advance of securing planning permission, the possibility of developers putting their own agreements in place was also discussed. This would allow for the same level of compliance as an agreement directly between the DSO and the landowner³⁴. However, those parties stated that in their opinion it would be easier and result in less cost to the developer if the DSO, rather than the developers themselves, put any agreements in place.

The DSO stated that there was no evidence to support this and also noted that options that are available to developers regarding securing signed agreements from landowners (at that stage of the process) could not be used by the DSO as while those methods could be in the best interests of an individual project, they could, if utilised by the DSO, not be in the overall interest of the construction of other assets.

³³ At the time of discussing this issue with respondents the Commission believed that all wayleaves were to be obtained prior to Consents Issue Date. The clarifications provided by the DSO as per Section 3.2.3 (that is, that all wayleaves are not obtained prior to the Consents Issue Date but instead the wayleaving process is interwoven with the construction of assets) were provided after these meetings.

³⁴ The landowner would sign an agreement with the developer to ensure that the DSO would be permitted to access the land for the purpose of constructing assets.

3.5 Summary and Commission position

3.5.1 Summary

All parties agreed that the proposals put forward by the DSO regarding this issue were a positive step in the right direction.

Some parties felt that the proposal did not go far enough and requested that signed agreements be put in place between the DSO and landowners prior to obtaining planning permission. They felt that this would be easier and less expensive than if the developer themselves put any agreements in place. On the other hand, the DSO has stated that these agreements would be difficult to put in place and that the best path for obtaining the necessary agreement for construction of assets would not involve putting them in place; it feels that its proposals provide the optimal approach to facilitating the construction of connection assets. The DSO also indicated that some options that are available to developers for securing signed agreements from landowners at that stage of the process could not be used by the DSO as while those methods could be in the best interests of their individual project, they could, if utilised by the DSO, not be in the overall interest of the construction of other assets.

3.5.2 Commission position

The Commission supports the DSO's proposal to introduce a collaborative approach for this stage of the project, which will accommodate increased interaction with both developers and landowners at an earlier stage of the project.

Having considered the submissions of all parties, the Commission is not convinced that requiring the DSO to enter into agreements with landowners in advance of securing planning permission provides the best path towards securing the compliance of landowners in all cases.

The Commission also accepts that there may be some instances where it would be beneficial to have agreements in place in advance of securing planning permission. However, it is not a given that the agreements must be put in place by the DSO. Therefore, if either the DSO or the developer feels that, for any particular connection, the best route towards gaining the compliance of landowners is to put agreements in place prior to securing planning permission, then either the DSO or the developer, as the case may be, can choose to undertake the process of securing those agreements. This is allowed for under current policy, but it is expected that in instances where this is being undertaken it would be aligned to fit in with the collaborative approach proposed by the DSO for consultation with landowners.

The IWEA & Synergy also requested that a liaison mechanism be included in the connection agreement pursuant to which the developer would have a number of

options, including the option to request that the System Operators exercise their statutory powers to secure the consents. While the Commission accepts that in some cases the System Operators and developers will choose to move down the route of exercising statutory powers, requiring the System Operators to document hard-and-fast rules could be counterproductive in that it would not allow for the degree of discretion that would be required on this matter in individual cases.

The TSO has advised that the DSO's proposals are broadly in line with its current practice. However, while the DSO has proposed to issue survey notices in all instances the TSO has stated that it would reserve the right to not issue those notices depending on the situation. This seems sensible as it will allow a degree of discretion to be exercised as required to cater for individual situations.

Therefore, the Commission endorses the DSO proposals on this matter. These proposals were provided by the DSO in relation to distribution connections. This decision paper does not require that any modifications be made to the TSO's processes in this area, as the Commission understands that they are already broadly in line with the DSO's proposals.

4.0 Certainty regarding timelines

4.1 Introduction

The IWEA & Synergy raised a number of issues in relation to the provision of certainty within the contracts for connection to the network. This section discusses these issues and takes the following format:

- Section 4.1 provides an introduction;
- Section 4.2 provides background information;
- Section 4.3 provides detail of the responses received to the consultation on this issue. The responses to the proposed decision are dealt with in a separate response-to-comments paper (CER/09/139) which has been published alongside this decision paper;
- Section 4.4 provides the Commission's decision on this issue.

4.2 Background

4.2.1 Summary of process/issues to date

As outlined in Section 1.3 of this paper, in the IWEA & Synergy initially approached the Commission to highlight their concerns regarding the standard connection agreements being offered by the System Operators for connection to the electricity network in Ireland.

The Commission then organised and chaired a number of meetings between the IWEA & Synergy and the System Operators. The IWEA & Synergy set out their issues and the System Operators outlined proposals which responded to some of those issues. Following on from this the Commission then consulted on the matters involved.

One of the more important issues raised by the IWEA & Synergy related to the level of certainty regarding costs and timelines that is provided by the System Operators within the contracts for connection to the network.

The previous consultation on this matter outlined the arguments put forward by both the IWEA & Synergy and the System Operators in this respect. For completeness these arguments are reiterated here.

The IWEA & Synergy stated that a number of risks can be managed directly by the System Operators or system owner such as materials procurement and, subcontractor management. The IWEA & Synergy suggested that a solution incorporating elements of certainty on time and cost and penalties for delays is needed to make projects bankable. The majority of wind farms are project financed, so making projects attractive to banks and financial institutions is an important consideration.

Engineering contracts, such as the FIDIC template, do provide for fixed costs and timelines, with exceptions to these constraints detailed in the contract. The IWEA & Synergy stated that this type of contract is the norm in the construction and engineering industry and should be adopted in this instance.

In essence, the System Operators argue that to achieve the most efficient connection for these complex projects a flexible approach must be taken. They highlight that not all risks are controllable by the System Operators³⁵. For example, the planning and wayleaving risk, which is usually the largest risk to projects, is beyond the control of the System Operators.

They also highlight that the connection is offered at cost³⁶; the timelines included are best estimates and no risk margin is included. The System Operators have proposed to maintain and expand upon a collaborative approach where the developer is provided with sufficient information to allow them to verify that the System Operators are managing the risks to the project appropriately. This is consistent with the current approach, but includes a greater commitment to information sharing, co-operation between parties, etc.

Both models work in practice. The standard connection agreements that are currently in place have been used to connect a significant number of wind farms in recent years. The FIDIC style contract which provides for fixed costs and timelines is an international standard and used in many different types of engineering project.

There are pros and cons to both approaches. The collaborative approach can provide greater flexibility, where the System Operators can deviate from the original plan to accommodate a request from a connecting party, no margin is applied and timelines are best estimates with no float added. However, where an issue arises during construction which has an impact on costs or timelines the System Operators have limited financial incentive to address the issue. Ultimately the connecting party bears the consequences. At this stage in the project the connecting party has limited ability to bear the consequences of cost overruns and delays. On the other hand the contractual approach would insulate the connecting party against some issues that would impact upon costs and provide compensation for overruns on the timeline. The risk profile of this element of a wind farm project could be reduced substantially and allow the connecting party to plan with some degree of certainty. However, it may be difficult to price the risk into a contract, in terms of both cost and time, in the absence of competitive tension. The flexibility of the other approach is lost to some degree; the object for the System Operators becomes contract compliance rather building the connection; where these objectives diverge it is the connecting

³⁵ This is all the more so at transmission given the split responsibility model whereby certain functions are reserved to the TAO.

³⁶ In the case of transmission the standard charges are provided by ESB Networks as TAO.

party that bears the consequences. Also the most significant risk elements, planning permission and wayleaving, even under the FIDIC style contract would most likely still rest with the connecting party.

4.2.2 Industry structure and contractual arrangements

The TSO also highlighted that there are differences that exist in respect of both the industry structure and contractual arrangements pertaining for transmission and distribution connections. It noted that the contestability rights afforded to transmission connecting parties to construct part or all of their connection does mean that a number of the issues raised can be the responsibility of the connecting party.

These differences are highlighted in detail within Section 2.1.2 of this paper, but the main points relating to the provision of certainty on timelines are summarised here. In relation to connection lead-times, at connection offer stage the TSO provides connecting parties with its best estimate of the time it will take to construct and commission the shallow connection works and any associated deep reinforcements³⁷. Connecting parties do, however, have the option of building their connection to the transmission system themselves, contestably, and therefore the lead-time for completing the (shallow) connection works can largely be controlled by the connecting party. Once a connection offer is accepted, the TSO ensures that the connecting party is kept regularly informed of progress on the connection works (shallow and deep) through regular (usually monthly) progress meetings. The obligations placed on the TSO and the connecting party to provide information prior to, and keep each other apprised of progress during, the consenting, construction and commissioning processes are comprehensively captured in Schedule 10 of the Transmission Connection Agreement.

The TSO noted it is worth remembering that, although it is the contracting party, the level of control it has on the lead-times for transmission works is somewhat limited. Although the TSO is responsible for the activities connected with seeking and obtaining the necessary consents, SI 445 (2000), which gives effect to the current electricity industry arrangements, amongst other things, assigns the responsibility for constructing (non-contested) transmission infrastructure to ESB Networks as the TAO.

4.2.3 Questions posed to interested parties

While the arguments put forward by both parties were summarised within the consultation paper (and published alongside it in separate documents), the Commission did not at that time take a view on which method should be adopted.

³⁷ This incorporates the standard lead-times provided by ESB Networks in relation to the carrying out of its functions as TAO under the split responsibility model at transmission level.

Instead the Commission sought the views of interested parties. In particular, the Commission sought answers to the following questions:

- a. Is there a preference for the collaborative approach proposed by the System Operators or the contractual approach proposed by the Developers? If so why?
- b. In the collaborative approach, does the proposed level of information sharing allow the developer to effectively monitor the TSO's and DSO's management of the connection works including the risks to both costs and timelines?
- c. In the contractual approach, which risks would be most appropriately borne by the relevant System Operator and which should be borne by the connecting party? Please indicate why.
- d. In the contractual approach, what compensation for failure to meet contract terms should be provided to connecting parties?
- e. In the contractual approach should the potential cost of the risks allocated to the relevant System Operator be determined ex-ante and priced into the charges included in the contracts? If so, how would these be determined and priced into the contract in the absence of competitive tension?
- f. In the contractual approach should the final customer bear the costs associated with providing any compensation under the contract? If so why?
- g. Under either approach are there additional issues with respect to transparency that could be addressed?
- h. Are there additional issues that interested parties believe should be addressed urgently that are not included in any of the papers?
- i. Please comment on the Developers issues and System Operators proposals, highlight where you agree or disagree with any of the issues or proposals.

4.3 Responses to consultation paper

While some respondents provided written responses that commented on the matter of certainty on costs and timelines, a large number of the respondents did not comment on this issue as part of their written responses. However, most of these respondents did provide further opinion on these matters as part of the post consultation meetings that were held between the Commission and respondents. The comments provided by parties are summarised below.

4.3.1 Collaborative versus contractual approach

Two respondents stated that based on their past experience they were not sure that the adoption of the contractual approach would speed up the construction of connection assets. However, one of these caveated this to say that they had little experience in the area, but emphasised that they liked the collaborative approach.

Other parties stated that while they supported the increased level of collaboration proposed by the System Operators some penalties were required to ensure that there was an incentive on the System Operators to ensure delivery of the project. Some respondents stated that while the collaborative approach is clearly better for the initial stages of the project, the contractual approach is much more appropriate to activities after Consents Issue Date, when in theory all permits and wayleaves would be in place³³. One party stated that the contractual approach was essential.

One party initially stated in their written response that they favoured the collaborative approach and that moving to the FIDIC type project with penalties would most likely result in less flexible delivery and risk premiums being applied, but modified this as part of the post consultation discussions to state that after further consideration they now saw that there was merit in a contractual approach.

The TSO noted that the current industry structure³⁸ separates the operation of the transmission system from its ownership and, where assets are either non-contested or are non-contestable provides for the construction to be carried out by TAO. This separation reduces the degree of control which the TSO, as contractual counterparty, has in respect of its ability to deliver the necessary infrastructure to facilitate connection and therefore reduces accountability and weakens the ability of the TSO to be incentivised against timely delivery. In general, it is supportive of well designed incentive mechanisms which suitability balance risk and reward, but these must recognise the degree to which the matters being incentivised are within the TSO's control. Currently the physical construction of connection assets is largely outside of the TSO's control and incentivisation around delivery is a matter primarily between the TAO and the Commission.

The TSO also stated that for all the reasons outlined in the Commission's consultation paper (the requirement of flexibility and the absence of it should a contractual approach be adopted, the degree to which matters are within the control of the System Operators, and the difficulty and cost of pricing in risk) it believes that a collaborative approach serves Ireland's requirements best for the

³⁸ Further points made by the TSO in relation to the current industry structure are detailed within Section 2.1.2 of this paper, and indeed the other TSO documents published as part of this process.

number and complexity of connections which Ireland is faced with in the coming years.

The TSO also noted that at transmission level statutory provisions exist for the contesting of shallow connection assets should the connecting party be of the opinion that it can improve upon the timescales for delivery.

The DSO responded to state that, on a general note, it has gained a deeper understanding of the issues being faced by developers as a result of engaging in this process. The DSO stated that its proposals, published as an outcome of that engagement should provide a good framework for an improved and more efficient process and should facilitate management of the high level of future connections. On that basis, the DSO reiterated that the collaborative approach is the best way to ensure that the government's renewable target is achieved.

4.3.2 Information sharing

Parties generally supported the level of information sharing proposed by the DSO. Some parties proposed some more detailed information that should be provided, but these have generally been captured by the DSO proposals that were published alongside this paper¹, or by proposals agreed as part of the Gate 3 decision paper⁶.

The TSO noted the points highlighted in the consultation regarding transparency, accountability and information sharing. It highlighted that for transmission connections, information sharing is captured within the TSO's Connection Agreement and that it ensures that the connecting party is kept regularly informed of progress on the connection works (shallow and deep) through regular progress meetings. It stated that it will continue to seek to improve in this area and will liaise with the industry more widely through the development of the Gate 3 Project Liaison Group.

4.3.3 Risk allocation

Some parties provided their opinion on how risk should be allocated between the developer and the System Operators. A common theme was that the risk associated with wayleaving should not be allocated to the System Operators³³.

4.3.4 Level of compensation

Some parties were not in favour of the contractual approach and thus did not provide their views on the level of compensation that should be provided in the event that connection assets were not delivered on time.

One party stated that the level of compensation should reflect the actual losses incurred by the non defaulting party. This could be related to cost of finance, additional overhead costs, and any loss in revenue.

One party stated that in principle liquidated damages should be applied to these contracts, but this should be as a last resort after failure to deliver as this approach could result in more conflict than physical grid. In order to provide an alternative to financial compensation this respondent suggested that a large amount of the connection payment be withheld by the developer until after the asset had been delivered.

4.3.5 Pricing of risk into the connection contracts

In general, respondents acknowledged that it would be difficult, in the absence of competitive tension, to price the risk into the costs associated with the connection contracts and to fix the associated timelines.

4.3.6 Should the Use of System customer bear the cost

One party stated that the extent to which the cost of any compensation was passed on to final customer was something that fell within the remit of the Commission to be managed. That party also stated that although the ultimate cost of compensation may trickle down to the final customer the actual savings resulting from more competitive wind generation being connected in a timely manner will greatly outweigh such costs.

4.3.7 Transparency

Any issues raised under this point have been covered by the 31 points in Section 2.0 of this paper.

4.3.8 Other urgent additional issues

Any issues raised under this point have been covered by the 31 points in Section 2.0 of this paper.

4.4 Commission decision

Having taken into account the views put forward by the System Operators, the TAO, the IWEA & Synergy and other developers, the Commission has decided to provide a mechanism by which developers can request to be connected through either the collaborative approach or an approach that provides for fixed dates with payments for late delivery. The finer details of how this will be implemented will be consulted on separately in the near future.

However, within its proposed decision paper the Commission highlighted a number of high-level principles:

- The standard costs that are currently in place do not include the margin which competitive businesses would price in if they were to be exposed to a penalty for late delivery. It is intended that the System Operators would be allowed to include some margin within their standard prices to allow for the risk that they are being faced with³⁹.
- The Commission does not envisage that the risk associated with the provision of a fixed date/payment mechanism would be covered by the Use of System / end-consumer.
- Subgroups would be allowed to opt for either the collaborative based approach with no penalties, or the fixed date/payment approach with penalties. Subgroups that opt for the collaborative approach would not be required to pay margins for risk.
- A default would be chosen. That is, unless agreement is attained within the subgroup for proceeding with either the collaborative approach or else the fixed date/payment approach, it must be decided that the subgroup will by default be connected through one or other approach. Given the increased cost that is likely to be associated with the latter approach, the Commission is minded to choose the collaborative approach as the default option.
- The Commission does not envisage the payments being of a magnitude that will cover the entire costs of the developer in the event of the System Operator (or TAO as the case may be) being late.
- This approach is being proposed for the shallow connection works that the developer is paying for directly, not the deep transmission works which are not being paid for directly by the developer.
- While timelines would be fixed, it would be accepted that both obtaining planning consents and wayleaves are not wholly within the System Operators' control and the timeline would be frozen should problems in relation to the obtaining of consents arise⁴⁰.

³⁹ For transmission, the risk allocated to the TAO would be priced by TAO, subject to the Commission's approval, into the transmission standard prices

⁴⁰ On foot of a proposal from the TSO, the Commission and TSO have entered into an incentive mechanism whereby the TSO is incentivised to lodge planning applications for shallow

- The date would only be fixed once the planning consents are achieved and the payment would therefore relate solely to delivery of the construction phase.
- This approach is being proposed for all renewable generators.

A number of parties commented on the above principles when responding to the proposed decision paper. This decision does not either provide a rebuttal to those comments or amend the above principles to allow for those comments. That will be covered off when the Commission carries out a further consultation on this matter.

Parties will also be provided with an opportunity to comment on the above as part of the next detailed consultation on this issue.

connection assets. The DSO has also communicated that an incentive mechanism may be appropriate to deal with the timely submission of planning applications for distribution assets.

5.0 Capacity bond

5.1 Introduction

The initial submission by the IWEA & Synergy raised a number of issues in relation to the capacity bond. These issues are documented within Point number 26 of that submission¹ and Section 2.2.26 of this document. In addition, other concerns have also been raised regarding the capacity bond.

This section discusses these issues and takes the following format:

- Section 5.1 provides an introduction;
- Section 5.2 provides background information on the capacity bond;
- Section 5.3 provides detail on the purpose of the capacity bond;
- Section 5.4 provides information on the issues that were initially raised by developers;
- Section 5.5 provides information on the Commission's view as put forward in the previous consultation paper;
- Section 5.6 provides information on the proposal that was put forward by the Commission in the previous consultation paper;
- Section 5.7 provides information on the comments that were received in response to the previous consultation paper;
- Section 5.8 provides information on the proposal that was put forward in relation to the capacity bond within the proposed decision paper; and,
- Section 5.9 provides a summary of the Commission's decision.

5.2 Background

The capacity bond is a bond that, under current connection policy, a connecting party has to put in place when accepting their connection offer. The bond is €10k per MW of MEC applied for and applies to all generation connections. The capacity bond is a feature of EirGrid's transmission connection policy since market liberalisation and the concept of the capacity bond was introduced into ESB Network's distribution connection policy with the advent of the group processing regime for renewable generators.

5.3 Purpose of the capacity bond

The purpose of the capacity bond is twofold with the primary purpose being to prevent parties from hoarding transmission capacity, which is a limited and valuable resource. The rationale is that the level of the financial commitment that the bond entails will dissuade a party from spuriously reserving transmission capacity to the detriment of other parties wishing to connect. The secondary purpose is to cover some of the costs incurred by the transmission system operator for the provision of deep transmission connection assets in the event

that a generating project does not proceed at the capacity applied for, that is, to limit the risk of there being stranded transmission assets. The transmission and distribution connection policy provides for costs of the deep transmission assets to be collected from all customers.

In the event of a connecting party failing to produce a level of generation that meets the MEC that it applied for (this could be due to the party not continuing with its connection offer or reserving more capacity than it required) the bond would be drawn down and set against the cost of transmission assets.

5.4 *Developers issues*

A number of parties have raised issues regarding the bond. While most agree with the purpose of the bond, its implementation gives rise to a number of practical issues. Some of the concerns raised are listed below:

- The requirement to post a bond as a condition of connection offer acceptance places a burden on the developer, particularly for small developers, at the time when there is already a significant financial commitment to the project;
- While the level of the bond is high enough to affect the financing arrangements, it is too low to prevent spurious projects or the hoarding of capacity;
- The bond is open ended; banks are usually unwilling to provide a bond of this nature; and,
- From the wording in the connection agreement it is unclear if it is possible for the bond to be drawn down and therefore it may serve no purpose.

5.5 *The Commission's view as put forward in consultation*

In the previous consultation on this issue¹, the Commission put forward its view on the capacity bond and proposed an alternative. The Commission's view as documented in the original consultation paper is repeated within this Section.

While the Commission understands the concerns of the developers, these concerns have to be balanced with the need to ensure that scarce transmission capacity is not inappropriately reserved. To date the capacity bond has never been drawn down. There could be a number of reasons for this. It could be that the capacity bond is effective and does act as a deterrent or perhaps it is unworkable or unnecessary.

In order to address the concerns raised by developers as outlined above, the Commission believes that there may be a need to modify the capacity bond and has done so within this decision paper. The context has changed somewhat since the introduction of the bond. The drivers for transmission planning will change in the near future. To accommodate the large level of renewable generators that will be connecting to the system in the coming years the TSO

have proposed to develop the transmission system on a strategic basis, that is, add transmission capacity in anticipation of need. This is a marked change from the current situation where transmission reinforcement is primarily driven by connection applications and load growth. This shift, to some degree, would reduce the need to have a capacity bond in place as deep reinforcements are less likely to be driven by individual projects, particularly individual small generators. Recouping the costs from generators that fail to connect, therefore, becomes a somewhat lesser issue.

The connection agreements provide for termination in a number of circumstances. Particularly relevant is the right to terminate the agreement at the Consents Issue Longstop Date and the Scheduled Operational Longstop Date⁴¹. This provides some protection against applicants hoarding capacity indefinitely as the connection can be terminated and the transmission capacity can then be made available to other parties.

The costs of the shallow connection provide some incentive to only reserve the level of capacity that a generator intends to use. There are thresholds above which larger and more expensive assets are needed. However, once a threshold has been reached the marginal cost of an additional MW of export capacity can be small, and this continues until the next threshold is reached. Thus the incentive to reduce shallow connection costs may not guarantee that the correct capacity, the capacity that the developer on accepting a connection offer is committed to using, would be reserved in all cases. The Commission believes that there is a need for a financial commitment to guarantee that the correct level of capacity is reserved. This has been reflected within this decision paper.

It has been suggested that the level of the bond is too low to dissuade those spuriously seeking to reserve transmission capacity or reserving the incorrect level. The Commission believes that a higher capacity bond level may act as a greater deterrent, but having a shorter timeframe would reduce the financial impact on those that reserved the correct level of capacity. This has been reflected within this decision paper.

The Commission also believes that there should be an incentive on connecting parties to comply with the Grid Code and Distribution Code and to achieve an Operational Certificate in a reasonable time. This issue has been addressed as part of this review of the capacity bond and has been included as an objective of the capacity bond mechanism.

The discussion above is predicated on the assumption that one generator alone cannot have a significant effect on the transmission system. This is by and large true for the renewable generators connecting under the group processing regime,

⁴¹ Note some of the terminology in the transmission and distribution connection agreements differs slightly.

however it may not be true for the large combined cycle gas turbines. Therefore, the following decision applies to all generators connecting to the distribution system and to renewable generators connecting to the transmission system under the group processing regime.

5.6 Previous proposal as put forward in consultation

To allow for the above the Commission put forward the following proposal as part of the initial consultation on this matter¹:

1. The capacity bond would no longer be required at connection offer acceptance. Upon offer acceptance the connecting party would be required to pay:

the greater of [X ; 10% of the cost of connection (assuming a connection constructed by the System Operators)]

where X = the lesser of {€10,000 per MW of contracted capacity (MEC); 50% of the cost of connection (assuming a connection constructed by the System Operators)}.

(this means that when accepting the offer the generator would be required to pay the greater of (a) or (b) below:

- a. 10% of the connection cost; or,
- b. The lesser of €10k per MW of MEC or 50% of the connection cost⁴².)

In the event that the project does not proceed this payment would be non refundable. For those projects which do proceed the monies paid upon offer acceptance would be netted off any further payments required.

This removes the obligation on generators to post a capacity bond at offer acceptance within the Group Processing Regime and also those generators connecting to the distribution system independent of the group processing regime. Making the first stage payment non-refundable will not increase the financial burden on the majority of connecting parties and would act as some deterrent to those that could otherwise accept a connection offer with no intention of advancing the project.

2. After accepting the connection offer but prior to the payment of the 55% connection fee⁴³ for a distribution connection and commencement of

⁴² This refers to cases where the connection assets are not being built contestably. If they are being built contestably and there is no (or very little) connection costs payable to the System Operators, then the €10k per MW of MEC would apply. If this payment was not required by the System Operators for connection costs, it would be offset against the bond required at a later date.

construction of the shallow connection works for a transmission connection, by applying for a modification to the connection offer, connecting parties would be allowed to reduce the requested MEC by up to 10% or 2 MW, whichever is the lesser. After this point parties would not be allowed to decrease the requested Maximum Export Capacity (MEC) until after full energisation and capacity tests have been completed.

Recognising that a number of projects will have been in the application queue for some time, this allows connecting parties to reduce the requested MEC without penalty up to the start of the construction of the shallow connection. The connection method and connection charge would remain unchanged for all members of a sub-group where one or more parties avail of this option.

3. For connection offers with an MEC less than or equal to 5 MW no capacity bond would be required. For connection offers with an MEC of greater than 5 MW a capacity bond will be required. For distribution connection parties the bond would be required at the final stage payment prior to commissioning and energisation; for transmission connection parties the bond would be required no less than one month prior to Energisation; or in either case 2 years from the start of the construction of the shallow connection works whichever is the earlier⁴⁴. For the avoidance of doubt a connecting party who did not post the necessary bonds would not be energised.

This would remove the obligation on smaller projects to provide a capacity bond. For larger projects the capacity bond is required just before energisation. The purpose of the bond is to ensure that connecting parties are incentivised to reserve only sufficient capacity for their project and timely completion of all testing necessary to achieve a full and final Operation Certificate.

4. The calculation of the bond amount would be based on €100,000/MW of MEC.

It was proposed to increase the rate used for the bond significantly to ensure it acts as an effective deterrent to those that would otherwise over reserve capacity.

5. The bond would work in the following manner:

⁴³ The 55% stage and other terminology in this section relates to the arrangements pertaining at distribution. The payment schedules and terminology within the connection contracts at transmission differ. However, while the terminology in this section specifically relate to distribution it should be interpreted as being that which is equivalent at transmission and which will ultimately be set out by EirGrid in its revised connection contracts.

⁴⁴ The inclusion of this 2 year requirement is to allow for the scenario where a developer delayed their project indefinitely during the construction phase.

- a. Where the connection party:
 - i. fails to export 95% or more of its contracted MEC within one year of its Connection Date; and/or
 - ii. fails to achieve an Operational Certificate within 12 months of its Connection Date;
 a portion of the capacity bond would be drawn down.

- b. The drawdown would be based on the following:

$$\text{Drawdown amount} = \text{Contracted MEC} * \text{€}100,000 * [(0.5 * \% \text{ export capacity not achieved}^{1.5}) + (0.5 * (\text{no. of months post Connection Date} - 12)^{1.5}) \%$$

That is, a generator which achieves a maximum export of 93% of its MEC and its Operational Certificate 15 months following Connection Date would have its bond drawn down to the extent of, $(0.5 * 7^{1.5} \% (9.26\%)) + (0.5 * 3^{1.5} \% (2.6\%))$ – that is, 11.86% of the capacity bond would be drawn down.

- c. The export capacity would be determined within the first year of connection through the capacity tests undertaken by the System Operators.
- d. If within 12 months of the Connection Date the connecting party achieves its Operational Certificate and passes its capacity test, the System Operation would return the bond to the connecting party.
- e. Where the connecting party fails to achieve its Operational Certificate and/or pass its capacity test within one year after the Connection Date, the System Operators would draw down a portion of the capacity bond in line with the results of the capacity test and the above calculation. The MEC in the connection agreement would then be reset to the level achieved in the capacity tests.
- f. Thereafter the System Operators would, at least annually, review the status of the connection. Where the connecting party continued to fail to achieve its Operational Certificate the System Operators will draw further amounts from the bond in line with the above calculation.
- g. If the connecting party failed to achieve its Operational Certificate within 48 months of the Connection Date the remaining amount of the bond would be drawn down, the connection agreement would be terminated and the connection would be de-energised.

There is a 5% allowance on the MEC within which the capacity bond would not be triggered for drawdown, that is, if the generator achieves 95% of the contracted MEC and receives its Operation Certificate within 12 months of the connection date then no penalty applies. The tighter MEC tolerance than previously allowed reflects the fact that connecting parties can reduce their requested MEC at a later stage in the connection process without penalty than previously provided for. The Commission believes it is prudent to include an incentive for connecting parties to achieve the Operational Certificate within a reasonable time period. The bond will, in most cases, have a maximum term of 49 months and much shorter if the connecting party meets its requirements⁴⁵.

6. ESB Networks and EirGrid would terminate the connection agreement should the Scheduled Operational Longstop Date be reached and connection energisation not achieved. The Scheduled Operational Longstop Date will be 30 months after the Scheduled Operational Date.
7. ESB Networks and EirGrid would terminate the connection agreement should the Consents Issue Longstop Date be reached. The Consents Issue Longstop Date would be 36 months after the Scheduled Consents Issue Date⁹. The developer could raise a dispute before the connection agreement is terminated.

The two points above would require the System Operators to terminate the connection agreement where connection is not possible or not being progressed within a reasonable timeframe, which then allows the relevant transmission capacity to be made available to the market. The period between the scheduled dates and longstop dates would be increased to allow for contentious planning or construction issues. However, in the event that the longstop dates were reached before connection and the developer wished to continue with the development and can demonstrate that all reasonable steps had been taken to progress the project and there was a reasonable possibility that the project could be connected in a reasonable timeframe, the Commission would consider extending the longstop dates for individual projects.

8. ESB Networks and EirGrid will review the connection contracts to ensure that the capacity bond is correctly implemented.

⁴⁵ Some respondents requested that the bond agreement should contain a clear expiry date. It is intended that the bond agreement will include an expiry date to reflect that fact that in the worst case scenario the bond must be kept in place until a short time (that is, one month) after 48 months of the connection date. If developers meet the MEC and Operation Certificate requirements prior to that date then the bond will be returned in advance of the 48 month stage.

This is designed to ensure that the capacity bond mechanism is correctly implemented and can be enforced if needed.

Comments were invited on the above proposal, and in particular the Commission requested that respondents reply to the following questions:

- a. Are the objectives of the capacity bond mechanism reasonable? If not, why?
- b. Does the proposed capacity bond mechanism deliver on its objectives? If not, why?
- c. Is there an alternative solution that would deliver on the objectives? Please detail any alternative proposals.
- d. Are the timeframes and level of bond appropriate? If not what alternatives are appropriate and why?

5.7 Comments received to consultation document

A large number of respondents commented on this proposal. The written responses are published alongside this proposed decision paper. In addition, some parties provided further information as part of the post-consultation responses on this issue.

Some parties had queries regarding the Commission's proposal and those were responded to during the post-consultation issues. Some clarifications have been incorporated into the proposal as documented in Section 5.5 to allow for these queries.

In addition to these queries, some issues were raised with respect to the Commission's proposal on the capacity bond (note that some of these issues would also arise for the current bond mechanism). These are detailed and responded to within Sections 5.7.1 to 5.7.12. Comments received in response to the proposed decision are not covered within Sections 5.7.1 to 5.7.12; these are dealt with separately within a separate response-to-comments paper (CER/09/139) that has been published alongside this decision paper.

5.7.1 The level of the bond

Comments

There were mixed views to the Commission's proposal regarding the capacity bond. One developer stated that the proposed level of the bond (that is, €100k per MW) was appropriate.

Another developer stated that while the level was excessive it would seem reasonable if developers were permitted to reduce their MEC without limitation up to the point of the 55% payment for distribution connections and commencement of construction of shallow connection works for transmission connections.

Another stated that financing the €100k would not prove problematic, but the threat of losing the bond could be an issue. However, this respondent acknowledged that their projects were balance sheet rather than project financed and from that perspective their situation could be different to other developers.

Other respondents stated that the proposed level was too high and that it should be reduced. Some stated that the introduction of a €100k bond would be unfair on applicants that had already applied. Another (relatively small developer) stated that the current level of €10k per MW was fair for financing and seems to be working.

One respondent stated that the fact that the bond has not been drawn down to date indicates that the current level is appropriate. However, as documented within the previous consultation paper on this issue the Commission does not accept that this provides definitive proof that the current level is appropriate as there could be a number of reasons why the bond has not been drawn down to date. Indeed some developers have stated that being faced with the drawdown of the €10k bond would not provide a severe financial deterrent regarding the hoarding of capacity, thus indicating that the current level does not provide an adequate deterrent in all cases.

One respondent stated that there was no need for a capacity bond as non-refundable connection costs would (in most instances) provide an adequate deterrent to developers intending to hoard capacity. The Commission is not satisfied that this is true, but in any event the respondent's proposal does not deal with situations where a developer would progress some element of the project, but not utilise all its requested MEC.

Commission response

While the Commission is still of the view that a bond greater than that currently in place is appropriate the Commission modified its proposal to reduce the level of the bond. This revision was documented within Section 5.8.3 of the proposed decision paper and has also been reflected within this decision paper. The revision also incorporates an opportunity to reduce the MEC level of the project as detailed in Section 5.7.3.

5.7.2 Timing of the bond

The proposed revision to the time at which the bond would be put in place aimed to reduce the length of time for which the bond would have to be financed by developers. All respondents that commented on this aspect were in favour of this revision.

5.7.3 Opportunity to reduce MEC to which bond is applied

Comments

Numerous respondents stated that there should be an opportunity to allow a project's MEC to be reduced substantially prior to putting the bond in place. Various reasons were provided for this request. For example, it was stated that since some projects have been in the queue for an extended period of time, during which time changes to their planning permission may dictate that they are no longer be in a position to develop the level of generation required to meet their requested MEC.

Another respondent suggest that a two phase bond should be adopted. Under that approach a small bond would be put in place at an early stage. This would ensure that applicants made some attempt to accurately estimate the level of MEC that they required when applying for an offer. Developers would lose the initial bond if they reduced their MEC at any stage prior to the initiation of the construction phase. A larger bond would then be put in place at a later date (pre-construction) on the MEC that they were requesting at that stage.

Commission response

The Commission allowed for the above comments by modifying its proposal as detailed in Section 5.8.3 of the proposed decision paper. The revisions borrow heavily from the proposal put forward by the above respondent and allow for the reduction in the MEC (a charge applies to any reduction) to which the final bond will be applied. This change has also been reflected in this decision paper.

Comments

On a related note, respondents also stated that one disadvantage of allowing unrestricted reductions in MEC would be that it could result in a change to connection methods for that developer and/or for the group of which they formed part of. It was stated that this would on face value seem undesirable in that it would cause reworking of connection offers, but the developer is paying the necessary modification fees for this change.

The respondents stated that the current policy already envisages the possibility that group members may fall away. In that scenario, the connection method would be revisited and any cost reductions would be passed onto the other parties, but any stranded costs would be paid for by the Use of System customer. The respondents queried whether there was really any difference between the impacts of, for example, a 40MW member of a group falling away and a 50MW member reducing its MEC to 10MW.

Commission response

Under the current process, regardless of when the developer applies to have its MEC reduced the connection costs to be paid by the developer will be either:

- The connection cost as per the original offer; or,
- The revised cost (including the cost of stranded assets) resulting from a successful modification request which would be made through the normal process.

In the above comment it was queried whether there was any difference between the Use of System customer paying for stranded connection costs in instances where a project is abandoned and in instances where a developer continued to progress its project, but reduced its MEC and was not required to pay for the original assets that they requested.

In the Commission's view there is a significant difference. In the former case the developer would not have signed an agreement with the relevant System Operator and it would therefore be difficult to require them to pay for unused assets. Therefore rather than requiring the other group members to pay higher costs, the Use of System customer picks up any shortfall. However, in the latter case there would be a signed agreement in place, the developer can be required to pay for the costs that they caused, and there is no convincing rationale why the Use of System customer would pay for the costs caused by that developer.

5.7.4 Queries on how the level of the bond was calculated

Comments

One respondent requested further information on how the level of the bond was calculated and stated that there was a lack of justification for the proposed rate of the increase and that further consultation should be carried out regarding modifications to the capacity bond.

Commission response

As stated in Section 5.3, the primary purpose of the capacity bond is to prevent parties from hoarding transmission capacity, which is a limited and valuable resource. The rationale is that the level of the financial commitment that the bond entails will dissuade a party from spuriously reserving transmission capacity to the detriment of other parties wishing to connect. The secondary purpose is to cover some of the costs incurred by the transmission system operator for the provision of deep transmission connection assets in the event that a generating project does not proceed at the capacity applied for, that is, to limit the risk of there being stranded transmission assets. The transmission and distribution connection policy provides for costs of the deep transmission assets to be collected from all customers.

The costs to the industry and the final customer of hoarding capacity are difficult to calculate. The costs may arise from less competition in the market, increased cost of production of electricity, increased cost of development to those wind farms project left in the queue or increased connection costs and timelines to those projects in the same sub-group as a spurious applicant. While it would be onerous to estimate the cost of this for each connection offer it is reasonable to state that there is a cost.

Similarly it would be difficult to determine the exact cost of stranded assets that would be caused by each MW of unutilised MEC. The Commission believe that the current level of €10k per MW would not, on average, come close to meeting that cost⁴⁶. It is likely that the level proposed within the previous consultation paper (€100k) would still not cover the cost those costs. Given that some developers had previously stated that the €10k bond did not provide an adequate deterrent regarding the hoarding of capacity the Commission proposed to increase the bond to a level that would provide more of a contribution to stranded costs and reduce the amount that would be covered by the Use of System Customer, and more importantly to a level that would provide more of a deterrent regarding the hoarding of capacity.

However, while a larger bond would ensure that genuine developers would be provided with the earliest possible opportunity to connect to the network (by increasing the level of deterrent for hoarding capacity), it is accepted that there must be a balance between setting the bond at a level that would act as a deterrent and also ensuring that the bond did not act as a barrier to entry. In this respect it is noted that respondents to the consultation paper have stated that the €100k level would pose a problem for both smaller and larger projects.

Thus the Commission reduced the proposed level of the bond as detailed within Section 5.8 of the proposed decision paper. Note that it is not anticipated that this level (or indeed the €100k level that was previously proposed) would provide a contribution that would cover in full the cost of hoarding and stranded assets due to unused MEC. This reduction is also reflected within this decision paper.

5.7.5 De minimis level for application of bond

Comments

One respondent queried why any de minimis level was being proposed given that each MW of scarce transmission capacity was as valuable as another. The hoarding of any level of MW would result in a delay in the connection of genuine projects; therefore the bond should be in place for all projects.

Another respondent queried why only developments up to 5MW had been granted an exemption. They stated that the proposed €100k bond may not affect larger and better financed projects, but it would affect the feasibility of many projects below the 10MW threshold. Therefore they proposed a de minimis level of 10MW.

In this context, it should be noted that another respondent stated that the proposed level of the bond would be significant for larger projects and suggested that a sliding scale should be introduced to offset the difficulties faced by larger projects.

⁴⁶ Note that it is not a given that the introduction of the GDS approach would eliminate the risk of stranded assets.

Commission response

For both of these requests, the Commission has not adopted the developers proposed solutions, but the underlying issue has been addressed by the decision to reduce the level of the capacity bond as documented within Section **Error! Reference source not found.**

Regarding the provision of a de minimis level, it should be noted that there has always been a de minimis level; micro-generators are not required to provide a capacity bond. It is also worth noting that for smaller parties to have a material effect on the transmission system, a large number of smaller parties would have to hoard capacity. In such a scenario, the transaction costs of progressing numerous applications would start to become a factor and would act as deterrent to any party hoarding capacity by progressing numerous smaller applications.

The Commission accepts that a higher or lower level could be set, but believes that the 5MW level is appropriate.

5.7.6 Use-it-or-lose-it

Comments

Some respondents suggested that a ‘use-it-or-lose-it’ approach be adopted whereby the MEC that was not utilised by a developer would be taken off that developer.

Commission response

The Commission’s decision means that, in the event that a developer did not utilise their MEC, the bond would be drawn down and in addition the unutilised MEC would taken from that developer. However, having a ‘use-it-or-lose-it’ approach on its own (without a bond) would still allow developers to hoard capacity for a number of years (without any financial cost) until it could be verified that their project was not meeting the required MEC levels. This would cause delay to the connection of genuine projects, hence some form of bond mechanism is required to provide a financial incentive to dissuade developers from hoarding capacity.

In the initial consultation, the Commission proposed that generators with an MEC up to and including 5MW would be exempt from the bond. No reference had been made as to whether these generators’ MEC would be reduced or lost if they did not meet their requested MEC. In this decision paper the Commission is clarifying that the MEC of these generators (that is, up to and including 5MW) would be subject to the same measurements and same reductions as generators over 5MW (as documented within Section 5.6 of this paper).

5.7.7 Timing of drawdown of bond

Comments

Some respondents suggested that in lieu of putting a bond in place, a mechanism would be introduced into the contract whereby after being energised the projects MEC would be measured and, if the MEC was not met, a fine would be paid (in lieu or having a bond to drawdown on). If the fine was not paid the project would be de-energised.

Commission response

The System Operators have stated that from their past experience deenergisation of a site is a very difficult process, and it would be difficult to enforce payment of any penalty through this method. Hence, it is likely that this method would not provide an adequate deterrent to projects which were hoarding capacity (resulting in a delay in the connection of genuine projects to the network), and the Commission does not direct that the System Operators adopt this process.

Comments

Alternatively it was suggested that the ability of the project to meet its MEC should be measured prior to the energisation of the project. If it was determined that the project would be unable to meet its MEC then the project would be required to pay a charge prior to being energised (which would be as per the amount of the bond that would otherwise have been drawdown after energisation).

Commission response

The Commission is not satisfied that the ability of a project to meet its MEC could be measured definitively prior to the energisation of the project. The System Operators currently measure the MEC by examining the actual output of the project post energisation. No proposal on how the variables involved such as wind speed due to the location, turbine quality, etc. could be accommodated within any pre energisation measurement has been put forward. Therefore the Commission does not direct the System Operators to implement this proposal.

5.7.8 Form of the bond

Comments

Some respondents stated that the form of the bond was inappropriate and requested that other forms be examined.

Commission response

The Commission has recently approved a framework proposed by the TSO (for bonds that are to put in place between the TSO and developers) which allows that, in cases where a capacity bond with an approved credit rating is not forthcoming from a connecting generator, other security arrangements such as

an Escrow or other deposit methods, letter of credit, parental company guarantee or a bond can be put in place in lieu of the approved rated bond, in cases where:

- The generator's parent company has a suitable rating; and/or,
- The generator's parent company is of significant commercial standing and has a sizeable balance sheet; and/or,
- Where the ownership structure is appropriate, for example in the case of a semi-state.

Rather than the matter being referred to the Commission on a case-by-case basis, this new framework would involve some professional judgement to be exercised by the TSO.

The Commission requested that the DSO examine the possibilities for accommodating a similar methodology for distribution connections. The DSO has agreed with these proposals on the basis that the bond is intended to cover transmission assets.

5.7.9 Complexity and impact on payment schedule

Comments

The DSO stated that this proposal introduces a level of complexity into an otherwise clear schedule for the payment of connection costs and was not compatible with the schedule of:

- Payment of 10% of the connection cost on offer acceptance;
- Payment of 55% of the connection cost prior to the commencement of construction;
- Payment of 25% of the connection cost one calendar month before the operational date; and,
- Payment of the balance of connection costs one calendar month after the operational date (it should be noted that this fourth payment was proposed within the consultation and proposed decision papers; however, this has been changed in this decision, as detailed within Section 2.2.16).

(Note that the Commission's decision on this matter changes the 10% payment to the greater of (a) or (b) below:

- a. 10% of the connection cost; or,
- b. The lesser of €10k per MW of MEC or 50% of the connection cost.)

The DSO stated that if the Commission felt that, in the absence of payment of a bond at offer acceptance stage, the 10% payment would not provide an adequate commitment from the developer to the project, then a simple option would be to increase the level of that payment. The DSO also requested confirmation that if the proposal were to go ahead the payment schedule would be revised to ensure that 65% of the connection cost would be paid before the commencement of construction.

Other respondents also queried the purpose of introducing this complexity.

Commission response

In the Commission's view it is important to ensure that, in the absence of the bond being put in place at the offer acceptance stage, the developer would provide some level of financial commitment at the offer acceptance stage. In some instances where the connection cost is relatively small, the 10% payment would not provide an adequate commitment. However, increasing the level of the initial payment for all connections would also capture projects for which the 10% initial payment already provides an adequate commitment.

Hence it has been proposed to change the rate of the initial payment to the greater of (a) or (b) below:

- a. 10% of the connection cost; or,
- b. The lesser of €10k per MW of MEC or 50% of the connection cost.

This will ensure that projects with larger connection costs will continue to pay 10% of their connection costs at offer acceptance, but the amount put forward for projects with smaller connection costs will be increased.

The Commission intends to continue with this proposal as it is necessary given the proposed movement of the capacity bond from this stage of the process.

However, as requested by the DSO the Commission has revised the payment schedule to require that 65% (in total) of the connection cost is paid prior to initiation of the construction phase.

5.7.10 Complexity of drawdown mechanism

Comments

A number of respondents stated that the drawdown mechanism was complex and requested that a simplified mechanism be used.

Commission response

The mechanism is required to ensure that the greater the deviation from either requirement (that is, the MEC and the Operation Certificate requirement), the greater the amount of bond that is drawdown. This ensures there is a greater incentive on developers to meet those requirements.

5.7.11 Operation certificate

Comments

Some respondents queried why it was proposed to use the bond as a mechanism to ensure compliance with the Distribution Code and the Grid Code. They understood that compliance with the code is not only a criteria of energisation but also of market participation.

Commission response

Some projects are operating without having attained their full operational certificates and therefore the link to the bond is being introduced to encourage plants to attain full compliance with the Distribution Code or the Grid Code.

5.7.12 Projects to which capacity bond proposals would apply

Comment

One respondent stated that any modifications to the capacity bond should not apply retrospectively.

Commission response

The revised capacity bond arrangements will cover:

- All renewable generators that are connecting to the transmission system and which are issued offers following publication of this decision paper; and,
- All types of generators (excluding micro-generators) that are connecting to the distribution system and which are issued offers following publication of this decision paper.

All applicants that fall into the above categories, but whom have already received offers will be allowed to request to move from the bonding requirements which they are currently covered by, to revised bonding requirements as per this paper. The default would be that developers that already received offers will continue to be covered by the bonding requirements that were in place when their offers were issued.

5.8 Commission decision regarding the capacity bond

As part of the initial consultation on the capacity bond (CER/08/145)¹ a number of concerns were raised by interested parties. Consequently, the Commission published a proposal which included revisions to accommodate some of those concerns within its proposed decision (CER/09/072)¹.

A number of respondents provided comments on this aspect of the proposed decision. There are summarised and responded to with the 'response to comments paper' that is published alongside this decision paper. Most respondents were broadly in favour of the revised proposal, while some requested clarifications and suggested some further changes. These comments have not led to any change to the Commission's decision on the capacity bond, relative to that proposed in the decision paper.

For clarity, this section provides:

- A brief summary 'current' policy regarding the capacity bond (that is, the policy that was modified by this decision);

- A brief summary of the initial proposal put forward by the Commission within the initial consultation on this matter (CER/08/145); and,
- A summary of the Commission's decision on this matter. The decision does not have any changes relative to the proposed decision, although some points have been redrafted to ensure greater clarity.

For responses to comments provided on the proposed decision, please see the 'response to comments paper' that is published alongside this decision.

5.8.1 Current policy

Current connection policy (that is, the policy that was modified by this decision) required that (in most cases) the capacity bond be put in place at offer acceptance stage⁴⁷. The level of the bond was €10k per MW and would be proportionally drawn down if a generator did not export 90% (or greater) of its MEC within a defined period of time of being energised.

5.8.2 Proposal on capacity bond as per consultation paper

The proposal as per the initial Commission consultation (CER/08/145) was that the bond would be put in place at one month prior to energisation. It would be €100k per MW and would be drawn down if the generator:

- Did not export 95% (or greater) of its MEC within a defined period of time of being energised; or,
- Did not attain its full operational certificate.

5.8.3 Commission decision regarding the capacity bond

As part of the above initial consultation on the capacity bond¹ (CER/08/145) a number of concerns were raised by interested parties. Consequently, the Commission published a revised proposal, which accommodated some of those concerns, within the proposed decision¹ (CER/09/072) on this matter.

A number of respondents provided comments on this aspect of the proposed decision. These are summarised and responded to with the 'response to comments paper' that is published alongside this decision paper. Most respondents were broadly in favour of the revised proposal, while some requested clarifications and suggested some further changes. These comments have not led to any change to the Commission's decision on the capacity bond, relative to that proposed in the decision paper.

The Commission's decision is outlined below.

1. The capacity bond will no longer be required at connection offer acceptance. Upon offer acceptance the connecting party will be required to pay:

⁴⁷ Instances where a bond might not be required are detailed within Section 5.7.8.

the greater of [X ; 10% of the cost of connection (assuming a connection constructed by the System Operators)]

where X = the lesser of {€10,000 per MW of contracted capacity (MEC); 50% of the cost of connection (assuming a connection constructed by the System Operators)}.

(this means that when accepting the offer the generator will be required to pay the greater of (a) or (b) below:

- a. 10% of the connection cost; or,
- b. The lesser of €10k per MW of MEC or 50% of the connection cost⁴⁸.)

In the event that the project does not proceed this payment will be non refundable. For those projects which do proceed the monies paid upon offer acceptance will be netted off any further payments required.

This removes the obligation on generators to post a capacity bond at offer acceptance within the Group Processing Regime and also those generators connecting to the distribution system independent of the group processing regime. Making the first stage payment non-refundable will not increase the financial burden on the majority of connecting parties and will act as some deterrent to those that could otherwise accept a connection offer with no intention of advancing the project.

2. At any stage after offer acceptance the party can submit a modification request asking for a reduced MEC.
3. Regardless of whether the party had reduced their MEC through a successful modification request (as per 2 above), up until the start of construction they will be allowed to request a reduction in the MEC against which their output would be assessed for the purposes of the capacity bond⁴⁹. They will pay €10k for each MW by which they reduce their MEC. **If a party does not request a change in their MEC then they will not be liable for this payment at this stage.**
4. After this reduction (for the purposes of the capacity bond), if any, the generator would then put a bond in place (one month prior to energisation or two years from Consents Issue Date, whichever is earliest) for €25k per

⁴⁸ This refers to cases where the connection assets are not being built contestably. If they are being built contestably and there is no (or very little) connection costs payable to the System Operators, then the €10k per MW of MEC would apply. If this payment was not required by the System Operators for connection costs, it would be offset against the bond required at a later date.

⁴⁹ The developer's connection costs would still be as per the original offer or as per the outcome of any offer that the developer received as a result of a successful modification request.

MW of their 'new MEC'. If the generators output did not meet 95% of this target, then the €25k bond would be subject to drawdown, as detailed below.

5. For connection offers with an MEC less than or equal to 5 MW no capacity bond will be required. For connection offers with an MEC of greater than 5 MW a capacity bond will be required. For distribution connection parties the bond would be required at the final stage payment prior to commissioning and energisation; for transmission connection parties the bond would be required no less than one month prior to Energisation; or in either case 2 years from the start of the construction of the shallow connection works whichever is the earlier⁵⁰. For the avoidance of doubt a connecting party who did not post the necessary bonds would not be energised.

However, the MEC of generators within this category would still be subject to measurement through the normal process and if the MEC was not met, it would be decreased as detailed in the previous proposal. The only difference is that they would not lose a bond as one would not be in place.

6. The bond will work in the following manner:
 - a. Where the connection party:
 - i. fails to export 95% or more of its contracted MEC within one year of its Connection Date; and/or
 - ii. fails to achieve an Operational Certificate within 12 months of its Connection Date;a portion of the capacity bond would be drawn down.

- b. The drawdown would be based on the following:

Drawdown amount = Contracted MEC * €25,000 * [(0.5 *% export capacity not achieved^{1.5}) + (0.5*(no. of months post Connection Date -12)^{1.5})%]

That is, a generator which achieves a maximum export of 93% of its MEC and its Operational Certificate 15 months following Connection Date would have its bond drawn down to the extent of, (0.5* 7^{1.5}% (9.26%)) + (0.5*3^{1.5}% (2.6%)) – that is,11.86% of the capacity bond would be drawn down.

- c. The export capacity would be determined within the first year of connection through the capacity tests undertaken by the System Operators.

⁵⁰ The inclusion of this 2 year requirement is to allow for the scenario where a developer delayed their project indefinitely during the construction phase.

- d. If within 12 months of the Connection Date the connecting party achieves its Operational Certificate and passes its capacity test, the System Operation would return the bond to the connecting party.
- e. Where the connecting party fails to achieve its Operational Certificate and/or pass its capacity test within one year after the Connection Date, the System Operators would draw down a portion of the capacity bond in line with the results of the capacity test and the above calculation. The MEC in the connection agreement would then be reset to the level achieved in the capacity tests.
- f. Thereafter the System Operators would, at least annually, review the status of the connection. Where the connecting party continued to fail to achieve its Operational Certificate the System Operators will draw further amounts from the bond in line with the above calculation.
- g. If the connecting party failed to achieve its Operational Certificate within 48 months of the Connection Date the remaining amount of the bond would be drawn down, the connection agreement would be terminated and the connection would be de-energised.

There is a 5% allowance on the MEC within which the capacity bond would not be triggered for drawdown, that is, if the generator achieves 95% of the contracted MEC and receives its Operation Certificate within 12 months of the connection date then no penalty applies. The tighter MEC tolerance than previously allowed reflects the fact that connecting parties can reduce their requested MEC at a later stage in the connection process without penalty than previously provided for. The Commission believes it is prudent to include an incentive for connecting parties to achieve the Operational Certificate within a reasonable time period. The bond will, in most cases, have a maximum term of 49 months and much shorter if the connecting party meets its requirements⁵¹.

- 7. ESB Networks and EirGrid would terminate the connection agreement should the Scheduled Operational Longstop Date be reached and connection energisation not achieved. The Scheduled Operational Longstop Date will be 30 months after the Scheduled Operational Date.

⁵¹ Some respondents requested that the bond agreement should contain a clear expiry date. It is intended that the bond agreement will include an expiry date to reflect that fact that in the worst case scenario the bond must be kept in place until a short time (that is, one month) after 48 months of the connection date. If developers meet the MEC and Operation Certificate requirements prior to that date then the bond will be returned in advance of the 48 month stage.

8. ESB Networks and EirGrid would terminate the connection agreement should the Consents Issue Longstop Date be reached. The Consents Issue Longstop Date would be 36 months after the Scheduled Consents Issue Date⁹. The developer could raise a dispute before the connection agreement is terminated.

The two points above require the System Operators to terminate the connection agreement where connection is not possible or not being progressed within a reasonable timeframe, which then allows the relevant transmission capacity to be made available to the market. The period between the scheduled dates and longstop dates allows for contentious planning or construction issues. However, in the event that the longstop dates were reached before connection and the developer wished to continue with the development and can demonstrate that all reasonable steps had been taken to progress the project and there was a reasonable possibility that the project could be connected in a reasonable timeframe, the Commission would consider extending the longstop dates for individual projects.

9. ESB Networks and EirGrid are to review the connection contracts to ensure that the capacity bond is correctly implemented.

This is designed to ensure that the capacity bond mechanism is correctly implemented and can be enforced if needed.

5.8.4 Further information on the capacity bond decision

The above decision contains elements of previous policy and the Commission's proposal as per the initial consultation paper. It also borrows heavily from comments provided by developers that responded to the initial consultation paper. The revisions relative to the initial consultation have the following benefits (Note that the capacity bond decision does not have any changes relative to the proposed decision paper):

- For connecting parties, it provides an opportunity to reduce their MEC prior to being subject to the €25k bond.
- The developers will be faced with a penalty of €10k per MW for reducing the MEC which they applied for. This is consistent with the policy that was previously in place and therefore would not decrease the deterrent that is currently in place for hoarding capacity. The benefits of having a deterrent in place have been outlined previously, but in general it attempts to ensure that the connection of genuine developers is not delayed by projects that are holding onto transmission capacity which they do not intend to use.

- As stated by one respondent, having a €10k charge in place at this stage (that is, for any reductions in MEC) will encourage developers to make a good estimate of their project size at the application stage.
- The early €10k charge followed by the €25k bond, will incentivise developers that are progressing an application for an MEC which is higher than they require to 'own-up' at an earlier stage (that is, under this alternative they would be encouraged to 'own up' and return unnecessary capacity prior to the start of construction, but under the previous policy if a generator had already applied for an MEC which is greater than they actually needed, then there was no incentive on them to reduce their MEC to the level that they actually need as they would lose the same amount of the bond in any event regardless of when they owned up. Note – this assumes that under the previous system the project would still proceed if it was evident that it would be liable for a charge under the capacity bond).

5.9 Summary of decision on capacity bond

In summary, at any stage up until the start of construction, the developer may request a reduction in its MEC. This reduction can be for any amount and for any reason. The developer would be required at that stage to pay €10k for each MW by which it reduced its MEC. The developer would still have to pay its connection costs as detailed in its offer for its original MEC, unless it progresses a modification request through the normal process resulting in a revised offer with a different connection cost.

One month prior to energisation (or two years after the Consents Issue Date⁹, whichever is earliest), the developer would be required to put in place a bond (or similar equivalent) of €25k per MW for the MEC that they are requesting at that time.

6.0 Summary and Next Steps

6.1 Summary

This section provides a summary of the Commission's decisions on areas as outlined in previous sections. For ease of presentation, the relevant aspects of those decisions are detailed below in order of when they would impact on the developer over the course of a typical project.

Where the decisions made here are already in place for transmission connections, it has been detailed within this paper for specific points, but has not been repeated below.

6.1.1 Pre offer acceptance

The Commission's has previously endorsed, within the Gate 3 decision paper, DSO proposals that allow for meetings to be held pre offer acceptance to discuss the undergrounding of connection methods or other non-LCTA connection methods.

6.1.2 At offer provision stage

The Commission endorses the DSO's proposals to provide a greater level of detail at the offer stage. This will include equipment lead-times, more detailed estimates of pass-through-costs and an indicative timeline detailing the work items that must be completed to construct the required assets.

6.1.3 At offer acceptance

At offer acceptance the initial payment required will be revised as per the Commission's decision in Section 5.8 of this paper. No capacity bond will be required at this stage.

6.1.4 Planning/design phase of the project

The Commission endorses the DSO's proposals for increased collaboration at the earlier stages of the project post offer acceptance.

6.1.5 Any stage prior to the start of construction

At any stage up until the start of construction, the developer may request a reduction in its MEC. This reduction can be for any amount and for any reason. The developer would be required at that stage to pay €10k for each MW by which it reduced its MEC. The developer would still have to pay its connection costs as detailed in its offer for its original MEC, unless it progresses a modification

request through the normal process resulting in a revised offer with a different connection cost.

6.1.6 After Consents Issue Date

After the Consents Issue Date⁹, the developer would be provided with an update to their connection costs. While the firm standard charges and estimates of pass-through-costs will have been provided at the offer stage, it is intended that this update will identify and fix some pass-through costs as detailed in Paragraph 2.2.11 of this decision paper (the remaining items are currently being discussed between the Commission and the DSO).

After the Consents Issue Date for a distribution connection, prior to moving into the construction phase a total of 65% of the total connection cost must be received from the developer. In most cases, the developer will have paid 10% at offer acceptance and will therefore pay 55% at this stage. However, in some cases due to the revisions made to the payment required at offer acceptance stage, the developer may have paid greater than 10% at the offer acceptance stage; in such cases they would only be required to pay the remainder to ensure that in total 65% of connection costs had been paid prior to moving to the construction phase of the project. The transmission payment schedule will be amended in a similar manner.

After Consents Issue Date, the developer will be provided with an updated schedule for completion of the works associated with the project (it is expected that the developer will have submitted any relevant information to the System Operators to ensure a co-ordinated plan). It is intended that there will be a mechanism by which developers (that is, entire subgroups) will be provided with an opportunity, likely at offer acceptance stage, of requesting that this updated schedule would be a fixed one, with some payment to developers for delayed delivery of the connection assets relative to that updated schedule.

Currently there is no risk margin included in the prices charged by the System Operators⁵². It is envisaged that developers that opt for the 'fixed date' process will be required to pay charges that include a risk margin (as would be the case normally for competitive companies). While the amount of compensation will be linked to the level of margin that would be priced in, it is not envisaged that the payments would cover all losses incurred by the developer due to the delayed delivery of connection assets. It is not envisaged that the Use-of-System customer will be required to bear any risk associated with this mechanism.

The details of how this payment mechanism will be implemented will be subject to a further consultation and comments will be invited on the level of payment, etc.

⁵² At transmission this is true for both the TSO's standard charges and TAO's standard charges.

6.1.7 One month prior to energisation

One month prior to energisation (or two years after the Consents Issue Date⁹, whichever is earlier), the developer would be required to put in place a bond (or similar equivalent) of €25k per MW of the MEC that they committed to at the offer acceptance or Consent Issue Date.

The developer would provide one months notice of their availability for the commissioning test. A suitable commissioning programme would then be agreed.

Parties connecting to the distribution network would pay the remainder of their connection costs.

6.1.8 Post energisation

The €25k bond would be drawn down as detailed in Section 5.8.3 of this paper if the MEC and/or Operational Certificate requirements were not met. In the event that the Operational Certificate is not achieved within four years, the connection agreement would be terminated and the connection de-energised as detailed within Section 5.8.3 of this paper.

6.2 Next Steps

This paper is a decision paper. However, some further consultation will be carried out separately in relation to how one of the high level decisions within this paper will be implemented.

That relates to the decision that connection parties should be allowed an option of connecting via a process that provides a fixed date for the delivery of shallow connection assets, with the connecting party being provided with some payment in the event of late delivery for those connection assets.

This consultation will commence shortly.