Irish Wind Energy Association

Submission to CER on:

Standard Transmission Charges and Timelines – A Consultation paper

11th September 2008, CER/08/167

1.0 Introduction

The CER's consultation paper on Connection Costs and Timelines is of huge significance to the Irish electricity industry. These parameters will play a central role in project assessments for wind developers, traditional generation developers and large industrial customers. These assessments are typically carried out by investors evaluating multiple potential investment opportunities. Higher costs and timelines will impact on Ireland's competitiveness and our ability to attract new investment and jobs. It will also feed into higher consumer prices for electricity and impact our ability to meet our national and international renewable commitments. The IWEA believes that it is essential that CER carries out a detailed assessment of the proposed costs and timelines to ensure that they are consistent with international and Irish best practice.

The IWEA has carried out a survey of its members to compare their experience on actual recent Irish project build with the proposals in CER's consultation paper. The full results of this survey are included in a separate commercially sensitive document provided to CER. This survey demonstrates that actual transmission costs in Ireland are on average 36% less than the proposed new charges and timelines. This data is based on actual experience of recent projects built in Ireland under contestability rules to precisely the same functional specification that ESB Networks are required to deliver infrastructure to EirGrid. Section 2 of this paper outlines these issues in more detail.

IWEA is also concerned that the proposed timelines are significantly longer than necessary. This will further complicate and delay investment. It is worth noting that many investors have already experienced significant delays in the connection process and are facing expiring planning permissions and turbine orders. Our concerns around the proposed timelines are set out in Section 3. A number of other specific concerns are included in Section 4 of this paper.

These issues are of increasing importance as contestability becomes more complicated to access due to the grouping of projects. The IWEA strongly urges CER to carry out a detailed assessment of the proposed costs and timelines.

2.0 Proposed Costs

The IWEA is very concerned at the levels of costs and the long timelines proposed in CER's consultation document. This data is not consistent with actual experience gained by wind farm developers and other parties that have recently developed transmission projects in Ireland. To demonstrate this IWEA has carried out a survey of actual costs and timelines experienced recently by developers in Ireland. This data has been provided to CER in a separate commercially sensitive document.

Table 1 below provides a summary of the data included in that document and illustrates that the average proposed costs are 36% higher than the equivalent costs incurred by IWEA members. . Note that tendered prices have been rebased using CPI to 2008 terms.

Item	EirGrid and ESBN	IWEA Average	% Difference
4 bay 110 kV substation	€ 2,870,000	€2,299,081	20%
110 kV line bay	€752,000	€647,911	14%
1 bay 110 kV substation	€1,394,000	€1,276,600	8%
110kV OHL 200mm2/300mm2 < 10 km	€380,000	€163,545	57%
110kV OHL 200mm2/300mm2 > 10 km	€340,000	€201,351	41%
110kV OHL 430mm2 > 10 km	€390,000	€206,388	47%
110kV OHL 430mm2 < 10 km	€ 370,000	€132,714	64%
110kV 1000mm2 Al cable	€ 922,000	€591,503	36%

Table 1: Summary of Results of IWEA members' survey of transmission costs

If the proposed prices are approved, it will expose the wind industry to additional costs of around €300m in shallow connection charges by 2020.

Furthermore, the costs proposed are not consistent with the CER approved Distribution Standard Prices for Generators 2007/8 or the connection charges approved by the CER in the Best New Entrant Prices. At the CIGRE event in Berlin in September 2007, Colm Twomey of ESBI presented ESB substation design titled "Substation design in a challenging regulatory environment".

His conclusions state that "A full review of existing practice has resulted in design changes which are expected to produce cost savings of up to 18% in 110kV substation construction. These savings should be obtained without a need for any dramatic changes in operational practice. As suppliers are continuing to innovate in this area it is expected that further savings will be achievable in the future. Further studies will be carried out before the next term contract enquiry to ensure that these savings are captured".

This does not seem to have been achieved one year later in the costs which are being proposed in this proposal.

It was also noted at the EirGrid conference (2008) that as ESB have term contracts in place with suppliers they are in a position to negotiate the best prices possible on equipment. This is not supported by the discrepancy in prices proposed and those available to developers through recent tenders. Additionally, in the published standard costs for ESB, the costs for 110kV cable is a pass through cost based on the tender price received, as Eirgrid do not consider pass through costs for cabling tender price received, IWEA would like a further breakdown of costs within this stage.

3.0 Proposed Timelines

The timelines proposed in the consultation document are significantly longer than could reasonably be anticipated. The implications of this are significant. Many wind farm projects have been in the connection process for several years and face difficulties with expiration of planning permission and increasing turbine lead times. If timelines such as those proposed are approved, many of these projects shall simply have expired. In addition to this the impact of delaying the procurement of the turbines is a higher increment than inflation on the price of the turbines, a delay of 1-3 years could result in a project becoming unviable.

We strongly urge CER not to allow these timelines to become accepted standards. Whilst we accept there is a body of work necessary to deliver this infrastructure, and the uncertainty of consenting remains, much improvement is possible by streamlining the processes and paralleling activities as far as possible. Specifically processes such as capital approval, equipment lead-times, carrying out of EIA's can be taken off the critical path by carrying out the activities in parallel from when a decision to proceed has been taken. Carrying out each activity sequentially in disjointed sections of work unnecessarily delays the delivery of the infrastructure.

It is noted that EirGrid has included in the consultation paper for a 110kV looped outdoor station:

Stage 1: 19 months

Stage 2: 26 months

During the EirGrid Conference the Stage 1 timelines were broken down into a number of activities including:

i. Receiving Capital Approval within EirGrid

IWEA would query the reason capital approval needs to be obtained when the developer has already paid a substantial payment on offer acceptance which is more than sufficient to cover the design work carried out up to Consents Issue Date (CID), at which time developers are required to pay 50% of the total costs and bond the remainder of the costs, thus eliminating the risk to EirGrid and the requirement to obtain capital approval.

We do accept in some cases that the Least Cost Technically Acceptable (LCTA) will differ from the actual connection method requiring capital approval to be obtained, however we still believe that this is not something that is required to be completed until CID, so therefore can run as a parallel process up to this point.

Also where a long lead-time item requires an order to be placed, we expect that the order should be placed directly following offer acceptance. In the event that the system operator believes that this may expose it to risks of stranded costs it should identify this to the developer and allow the developer the option to take on the additional risk of placing this order.

It was also indicated at the EirGrid conference that Stage 1 timelines included the following activities:

ii. Site acquisition/route selection
iii. Environmental assessments
iv. Planning permission packaged and lodged
v. Planning Permission granted.

In some cases all necessary planning permission and site acquisition may already have been obtained by a progressive developer in advance of receiving their connection agreement at the sole risk of the developer. If this is the case, timelines for Stage 1 are zero and the project should move onto stage 2 on offer acceptance.

The experience of many IWEA members in relation to stage 1 timelines is that it takes 2 months for site selection and a further 4 months to prepare a planning permission for a site that has no ecological constraints associated with it.

IWEA does not believe that the timelines should include any estimate for the granting of planning permission as it only serves to further inflate the timescales, in addition to this we believe that EirGrid should package the committed project parameters based on successful planning permission and not wait to kick off stage 2 design work until it is achieved, as any amendments are unlikely to be significant to the package as a whole. The IWEA would welcome the consideration of intermediary timelines within stage 1 and 2, such as lodging planning permission, complete CPP, Complete PIP etc.

IWEA members have raised significant concerns around the proposed stage 2 timelines. For example, it is the experience of IWEA members that a 110kV Outdoor Looped Station, may be built contestably in 11 months (including 2 months for commissioning). EirGrid's published timelines are 26 months for the same work. IWEA do not believe that it is tenable to institutionalise a difference of this magnitude.

IWEA would also like to ask for clarification with respect to timelines presented as indicative as they can be subject to significant variation, particularly due to delays in receiving the necessary planning permission. Significant variation needs to be defined and the impact of planning issues clarified.

4.0 Additional Specific Issues

Standard 110 kV Cable sizes

The description of the 110 kV cable sizes in the consultation is 1000 mm^2 or 1600 mm^2 aluminium. The IWEA is concerned that it is being proposed that 1000 mm^2 Al will become the minimum transmission standard. Recently 110 kV cable connections for wind farms have been 400 mm^2 Al and 630 mm^2 Al. The 630mm^2 Al provides sufficient capacity to meet the needs of most of the proposed 110 kV connections for Gate 2. In terms of capacity the 630mm^2 Al is approximately equivalent to the minimum standard for 110 kV overhead lines, the 200mm^2 ACSR line. It appears unreasonable for the minimum standard cable to be of greater capacity than the minimum standard 110 kV overhead line. It is currently the case for overhead lines that if the system operator decides to future proof the system by insisting on a larger conductor being installed the incremental cost is met by the system operator and recovered through TUoS. The IWEA would propose that the 630 mm^2 AL be used as the minimum standard for 110 kV cable and the system operator reserve the right to request a larger conductor for future proof reasons with the additional cost to be recovered throughf TUoS.

Timelines should have a range including min-max rather than just a max

The timelines provided in the consultation document appear to be based on a number of ESB Networks and EirGrid tasks being complete in series with little or no tasks being complete in parallel. As has been the case in some previous non-contestable connections the timelines have been shortened by carrying out a number of these tasks in parallel. Examples would include advanced works packages of design, procurement or civil works. Allowing for a flexible approach in the construction process and the infrastructure agreement should allow for a range of min-max timelines.

Capital Approval Process

Periods to get capital approval are included in the proposed timelines. For shallow connection assets this step in the process seems unnecessary as the generator typically pays for 100% of the connection costs. The IWEA requests that capital approval processes be reviewed to remove any unnecessary delays.

Removal of uncertainties due to planning permission

The greatest uncertainty in the timelines is the consent period to get planning permission and wayleaves. This timeline should be separated from the Stage 1 timelines to provide a transparent segregation between the tasks that EirGrid have complete control of and those involving third parties.

Station Common Costs

It was noted at the EirGrid conference workshop, 2008, that costs for existing stations could not be provided as they are station specific, we accept that there could be varying levels of depreciation to apply depending on the age of the station, however we believe that a standard

cost with a depreciation factor advised to be applied depending on the age of the station could be developed.

Missing items from consultation paper

It is also noted that the items of equipment below were not given standard charges in the consultation paper but given their standard nature it would be useful to include them:

1. 220/110kV Transformers
2. 400/220kV Transformer
3. All 400kV Equipment
4. Tie in Costs for 110kV, 220kV and 400kV overhead lines or indeed underground cables into new stations
5. 400kV, 220kV and 110kV Busbar extension costs
6. Existing station common costs
7. Maximum values for Civil works for 110kV, 220kV and 400kV substations
8. Metering and SCADA

5.0 Conclusions

The IWEA has conducted a survey of recent, actual transmission costs experienced by independent developers in Ireland. These costs are on average 36% lower than the proposed standard costs in CER's Consultation paper. The proposed timelines also appear to be significantly longer than might reasonably be expected based on the experience of private developers.

These issues are of fundamental importance to the Irish electricity sector and will impact on Ireland's competitiveness and ability to attract international investment. The IWEA strongly recommends that CER conduct a detailed analysis of the proposed costs and timelines and ensures that the final standard costs and timelines are consistent with international and Irish best practise.