

**WIND STEERING GROUP
Meeting No 2
CR3**

**Thursday 12th February 2004
14:30 - 17:30hrs**

CER/04/210

Attendees	Denis Cagney	CER	Chairperson
	Eugene Coughlan	CER	
	Clíona McNally	CER	Secretary to Group
	Sheenagh Rooney	CER	
	Padraig Fleming	CER	
	Claire Beausang	CER	
	David Naughton	CER	
	John McCann	SEI	
	Morgan Bazilian	SEI	
	Adéle Sleator	ESB NG	
	Simon Grimes	ESB NG	
	Gay Kirwan	ESB Networks	
	Tony Walsh	ESB Networks	
	Paddy O’Kane	IWEA	
	Paddy Teahon	IWEA	
	Grattan Healy	MnG	
Jan Olesen	MnG		

Apologies OFREG

IWEA – Irish Wind Energy Association

MnG – Meitheal na Gaoithe

Introduction

SEI proposed that a terms of reference be developed for the group.

The CER noted that the Steering group had an oversight role in monitoring progress on the issues set out in the Commissioner’s letter to Kieran O’Brien (ESBNG) of 23rd December 2003 which agreed to the extension of the moratorium to 31st March 2004. This letter, together with the email of invitation to members of the group, provided the terms of reference.

1. Agenda

The proposed agenda was agreed.

Minutes 1st Meeting

The minutes were discussed and a number of changes proposed.

A duplicate sentence was removed.

MnG noted that:

1. Ireland had a target to achieve in line with the Renewables Directive
2. That they had stated that a long delay in lifting the moratorium could be in breach of the Renewables Directive
3. That the fault ride through (FRT) requirement was creating the need for models.

Points 1 and 2 were accommodated into the minutes while also noting that the grid access provisions in the Renewables Directive were without prejudice to maintenance of the safety and reliability of the national grid.

Regarding point 3 ESBNG noted that the provision of a turbine model was not a new requirement as a result of the introduction of FRT. IWEA commented that the requirement to have a turbine specific model, rather than a generic model had applied since November 2003. It was noted that generic models were not accurate for different turbine types.

2 Grid Code for Wind

ESBNG gave an update regarding progress in this area. A further meeting had been held which had moved forward the issues of fault ride through (FRT) and Frequency, and had introduced the Voltage proposals.

SEI noted that good progress was being made. ESBNG commented that the wind consultation group was close to reaching consensus on these three issues. IWEA noted that there was one objection outstanding regarding FRT.

IWEA indicated that it maintained an objection to the one-second recovery provision under FRT. CER stated that it would ultimately make a decision on the proposed new code after it has received it.

MnaG sought clarification on derogation requests, as these were being handled based on the emerging grid code, and asked whether that included areas of disagreement, like FRT.

ESBNG stated that they were currently on track to deliver the first proposal on time (15th March). The next meeting is scheduled for 3rd March.

3 Interactions between Distribution Code and Grid Code for Wind

ESBNG and ESB Networks stated that this matter is being moved forward in conjunction with the Grid Code for Wind. There has been a further meeting and the issues of FRT, frequency and voltage control have been discussed.

ESBNG indicated that agreement had broadly been reached between themselves and ESB Networks on a number of the issues. On others e.g. voltage, frequency and signals some further work is needed.

It was noted that it is likely that certain classes of distribution connected wind farms would be required to have, amongst other things, FRT capabilities.

The intention is that ESBNG and ESB Networks will bring a joint proposal to the Wind Grid Code forum for the group to consider.

It was noted that these changes would also have to go before the Distribution Code Panel and that this was being arranged by ESB Networks.

4 Survey of Existing Offers

CER stated that there had been an interim meeting with Liam O'Donnell. The early indications are that the majority of the projects (approx. 90%) with connection offers will be delivered.

IWEA stated that a probability rating rather than a simple Yes/No was required to accurately assess the impact. CER stated that this would be considered.

MnG asked if timeframes in terms of construction in years was being assessed. CER stated that this was the case.

IWEA asked what the process was. CER stated that a draft version of the survey was due on the 4th March 2004 and the results will be provided to the steering group subject to confidentiality requirements. CER will use the information from the survey as part of their decision regarding the moratorium.

CER mentioned that several projects which were caught by the moratorium announcement, were alleged to have in fact been due connection offers by that date, but didn't receive them. CER stated that it would consider these cases on an individual basis.

5 Reconciliation of Connection Offer Processes

ESB Networks stated that a meeting had been held, an issues list drawn up and there would be a further meeting tomorrow with ESBNG. General agreement had been reached between ESB Networks and ESB National Grid

CER has written to both system operators subsequent to the first meeting requesting that proposed changes be submitted as per the workplan to the CER by the end of February.

MnG queried whether there would be changes to both the transmission and distribution connection offer process. It was stated that changes to both are being considered.

SEI asked if the revised processes would be subject to public consultation. CER said that it would decide if the proposed amendments merited consultation

when it has received the proposals from the network operators. [Note: Both processes were published for consultation on 23rd and 25th March].

6 Programme for Modelling Wind Generation Plant

ESBNG stated that they had just received one turbine model from the manufacturers which has to be tested. They had promises of three others. One model has been tested previously and was unsatisfactory. They believe there is an up updated version due to become available.

ESBNG carried out a survey of what type of turbines participants were intending to or have already installed. ESBNG were informed that 18 different types of turbines are present or being installed in Ireland. These 18 types come from a total of 6 manufacturers. ESBNG have received promises of models from 4 manufacturers who have a number of different turbine types.

ESBNG noted that most of the parties with grid connection offers are from the 4 main manufacturers who have given commitments regarding wind turbine models.

ESBNG confirmed that there are no validated models to date.

IWEA stated that 'validation' meant many different things to different people and clarification should be provided on what was required. IWEA believed 'approval' would be a better term.

ESBNG said that there were essentially two methods of validation; type test validation and field validation. It indicated its validation procedure would involve plugging the model into the overall grid model, and testing the response. Firstly the model would have to function properly within the overall grid model, and do what it was supposed to do, accurately reflecting the claimed behaviour of the turbine it modelled. Secondly the modelled behaviour would have to remain within code. There may be a need for some level of testing against reality, but not full field-testing.

The timeframe for carrying out system dynamic studies was discussed. ESBNG stated that that it would take of the order of 4-6 months to carry out the system modelling after the individual turbine models had been tested and validated. SEI commented that the programme was aggressive and optimistic and would involve devoting a lot of resources.

MnaG asked what the output from this 3-6 months work would be - changes to the system, or rejection of certain turbines or both? The answer was modifications of the system, and possibly the codes. MnaG then suggested that the 3-6 months of work would not alter the picture as regards letting turbines on the system.

IWEA pointed out that since November last, all applications had to be accompanied by a model specific to the turbine involved, rather than a generic model, which had been the previous practice.

MnaG asked if connections agreements are conditional on complying with the grid code, and therefore on producing an adequate model. ESB NG stated that it considered it already has the means by virtue of the Grid Code.

In addition IWEA and MnG requested that the requirements needed on the manufacturers in terms of modelling be identified and made public (e.g. on the

Eirgrid website) so that developers can talk to the manufacturers regarding the issues. For example a list of the turbine models needed, the models which have been validated and the criteria that the models must contain.

ESBNG stated that they do not want to over specify the modelling criteria. IWEA argued that there should be an independent consultant to ensure that the modelling requirements are reasonable. ESBNG stated that they are organising this.

CER suggested that a note from ESBNG regarding the requirements to get a model validated would be useful for the developers to put pressure on their suppliers. It was proposed that ESBNG could issue a list of approved and validated turbine manufacturers and their models. This could be developed over time to inform developers and provide manufacturers with incentives to deliver.

ESBNG indicated some concerns about confidentiality. However, MnG said that industry definitely needs to know which models are approved when choosing equipment. MnG suggested that ESBNG make it known to manufacturers that they intend to produce a list of approved models, with a view to seeking their models for approval. Once approved, the list would be published. IWEA has taken on the task of contacting the manufacturers with these broad ideas in mind, and to establish the state of play with each.

CER suggested that ESBNG could write to the manufacturers requesting their permission to publish a list of the manufacturers and turbine types and who has submitted models and whose are validated.

ESBNG stated that the transmission grid connection agreement requires the submission of a turbine model and that this has always been required from generation.

MnG and IWEA requested that ESBNG create a library/database of wind turbine models and the required information.

ESBNG agreed to set out the steps required for testing/validation of the model. [Note: On 5th March ESBNG published a paper entitled, "Wind Generation Dynamic Studies Models and Model Validity".]

7 Other Business

The CER updated that group regarding the East West Interconnector and the Commissioners presentation to the Joint Oireachtas Committee on Agriculture and Food.

ESBNG raised the issue of constraining wind farms and suggested that the technical and economic issues need to be debated and discussed, as they are complex.

SEI felt that this was not the forum for considering the issue of constraining windfarms.

MnG stated that the constraining of windfarms must be an absolute last option as no fuel is being saved. It stated that compensation is required. It also added that modelling aggregation tends to overestimate wind generation. Cautious design tends to lead to oversized grid capacity, and these three issues lead to

underestimates of grid transfer capability.

8 Date of Next Meeting

Date of next meeting (No.3) set as – 12th March 2004 at 2.30pm in CER offices.

A further meeting date (No.4) was set – 22nd March 2004 at 2.30pm in CER offices.

