IWEA response to the CER consultation on the Rate of Change of Frequency (ROCOF) Modification to the Grid Code

09 August 2013

General comments

The Irish Wind Energy Association (IWEA) welcomes the opportunity to comment on the CER consultation on the Rate of Change of Frequency (ROCOF) Modification to the Grid Code. This modification should facilitate an increase in the System Non-Synchronous Penetration (SNSP) limit from 50% to approximately 60% in the coming years which will underpin an eventual increase to 75% SNSP supported by investment in flexible system services under the DS3 programme. IWEA therefore sees the approval of this modification as a crucial factor in the achievement of Ireland's 2020 renewable energy targets and the mitigation of curtailment of renewable energy.

EirGrid estimates the benefits of increasing the SNSP to 75% to be approximately *€300m per annum* on an all island basis from 2020. IWEA understands that the cost of conventional generator studies to assess the fleet's capability of moving to a new ROCOF standard is significant but this should be viewed in the context of estimated annual benefits. With that in mind, IWEA proposes that cost recovery options based on the expected savings to consumers may be appropriate for generator ROCOF studies. A coordinated approach with rigorous timelines overseen by CER and supported by EirGrid should ensure that only efficiently incurred costs are recoverable and will provide a level of independence to the studies being carried out.

Finally in these general comments IWEA would encourage the Commission to progress in tandem with the ROCOF modification other options for increasing the SNSP limit.

Consultation questions

1. *Do you agree with the CER's proposal to approve MPID 229 in principle?*

IWEA supports the ROCOF modification MPID 229. As outlined in the TSOs recommendation paper, this modification is necessary to avoid substantial system costs. This modification is essential to ensure that the electricity system on the island of Ireland can support large amounts of renewable generation, in particular wind. Ireland has a policy objective of 40% electricity generation to come from renewable sources by 2020 and, in order to achieve this, large amounts of renewables will be required on the electricity system. In order for this to be managed efficiently the SNSP levels will need to increase from 50% to 75% in the coming years. The introduction of this grid code modification is an essential

component of raising the SNSP limit and it is essential that it is introduced in a reasonable timeframe. Increasing the SNSP limit on the system will reduce wind curtailment and provide greater investment certainty in renewable energy on the island of Ireland. Any delays to the increase in SNSP being implemented will undermine the investment case and likely cause a fall-off in build rate.

2. *Do you agree with the conditions for giving MPID effect in the Grid Code?*

The secure operation of the power system is of paramount importance to all generators and users of the electricity system. IWEA supports that the modification should be introduced when the system can be operated safely, however **there needs to be urgency regarding the timescales allowed**. IWEA is concerned that this workstream is already behind schedule and wind generators may suffer as a result of increased levels of curtailment than would have been expected in 2014 (when the first increase in the SNSP limit was expected).

3. *Do you agree with the proposal to establish an implementation project to co-ordinate the activities of generators and system operators?*

IWEA agrees with the proposal to establish an implementation project to co-ordinate the activities of generators and system operators. It is essential that the activities of generators and system operators are coordinated to ensure the work can be carried out as quickly as possible and efficiencies can be gained in costs where a number of studies can be carried out together, e.g. for the same/similar turbine type across different generators. Consideration should be given to identifying where efficiencies can be obtained at the project planning stage. It is essential that the costs of the studies to be carried out should be minimized as much as possible.

The implementation project should have **hard deadlines** to ensure that sufficient progress is being made on the studies. IWEA notes that in the case of controllability of wind farms, the use of a hard deadline ensured that there was sufficient focus on the project so that there was proper engagement from generators. A similar process should be followed for the ROCOF studies to ensure that timelines don't slip any further. Any delays to the timelines are likely to result in an additional cost to the consumer. In the absence of hard deadlines there is a risk of ongoing discussion and insufficient action.

4. *Do you agree with the proposed high level governance structure?*

IWEA supports that EirGrid should carry out the project management under the oversight of the CER. EirGrid are best placed to ensure the studies carried out are sufficient to satisfy their concerns regarding security of the system. They are also best placed to provide information to the generators, where required, to facilitate the studies being carried out.

It is essential that the CER, EirGrid and their advisors/consultants have oversight of the studies which are carried out and have access to the reports which are produced. The studies should be independently verified. In the case where these studies may form the basis for future derogation requests it would not

be efficient from a cost point of view if further advisors/consultants were required to asses these studies at a later date at an additional cost. IWEA proposes that this is given appropriate consideration at the project set-up stage.

5. *Do you consider that the costs for the technical studies should be recoverable?*

IWEA has always supported that grid code compliance is paid for by generators and wind farms haven't looked for cost recovery in relation to grid code compliance. However, as noted in the consultation paper, the ROCOF modification is different in nature from other Grid Code modifications in that the costs for delivery of compliance rest chiefly with conventional generators without associated benefit from making the required investment with the exception of the generators with wind plant in its portfolio which will accrue some benefit with reduced levels of curtailment. In the case of the ROCOF modification, it is recognised that the main benefits accrue to the consumer through increased levels of allowable renewable generation and the long term reduction of energy costs arising from this, and to wind generators as a result of reduced levels of curtailment. IWEA believes it may be appropriate to review, in this instance, if it would be reasonable that the costs of the studies could be recouped through the expected savings that will be made in running the system with higher levels of SNSP. The process for determining the pot available for the studies could be carried out in a similar manner to the System Services Review Process, whereby the value of the benefit to the system can be determined. IWEA believes that cost recovery may be appropriate in this instance in light of the benefit that will accrue to the consumer, however it is essential that there is **strong enforcement of timelines** and that the studies are brought to completion as soon as possible. By allowing cost recovery the oversight of the CER and EirGrid is essential to ensure that efficiencies are being achieved where possible and to ensure the studies are **fit-for purpose** and can be **independently verified**.

6. *Do you agree with the proposed introduction of a GPI for ROCOF?*

IWEA supports the introduction of a Generator Performance Incentive for ROCOF as this will promote compliance with this modification given the importance of this modification for the achievement of Ireland's renewable energy target, but any such incentive mechanism should be carefully designed to avoid unintended consequences and should be progressed under the remit of the SEM Committee as Other System Charges are harmonized on an all island basis. The introduction of a scalar seems appropriate to reflect the larger impact the bigger generators will have on the system.

7. *Do you agree with the proposal to require EirGrid to explore and implement alternative solutions?*

IWEA agrees with the proposal that alternative solutions should be investigated. There is a risk that, following the studies being carried out, some generators may not be able to meet the ROCOF requirement. In this event alternative solutions will be required. There is an additional benefit that these alternative solutions may enable further integration of renewables into the future and should be

investigated with a view to future renewable energy scenarios. However, any work carried out in this regard **should not delay** the work to bring in the ROCOF requirements as soon as possible.

8. *Are there any other issues you wish to raise?*

In the event that conventional generators are unable to demonstrate compliance with the ROCOF grid code modification, and no alternative solution alternative solution is found, the achievement of the 2020 targets for renewable electricity is likely to be more difficult. More wind capacity may need to be installed which would need to be able to withstand higher levels of curtailment. In order for the appropriate investment to take place there may need to be higher levels of compensation or changes to the support scheme, which would ultimately end up adding significantly to the cost to the consumer. This would not be an efficient way to meet the targets and IWEA strongly recommends that the reduction of wind curtailment is the most efficient way to ensure the targets are met at the least cost to the consumer.

The DS3 programme is an extensive programme with a number of other key initiatives aimed at raising the SNSP level. IWEA notes that these other initiatives should also move forward as a matter of urgency to ensure no further delays in the delivery of the DS3 programme and its associated benefits for all.

IWEA welcomes the opportunity to engage in this consultation and is available to meet or discuss any of these issued further.