IWEA Response to the Proposed Decision Paper on the Treatment of Curtailment in Tie-Break Situations (SEM-12-090)

15 November 2012

1. Executive Summary

IWEA welcomes the SEM Committee Proposed Decision Paper on the Treatment of Curtailment in Tie-Break Situations (SEM-12-090) and the opportunity to review the allocation of curtailment which is a critical matter to be addressed to provide a stable policy framework to allow the wind industry move forward. IWEA welcomes the proposed decision that curtailment be allocated on a pro rata basis however we strongly oppose the proposal to reduce and remove the levels of compensation to generators for curtailment. This proposal is both retrospective and discriminatory and such a change would be very damaging to investor confidence and undermine any confidence in a stable policy framework.

The following points outline the main aspects of our response to the Proposed Decision:

- IWEA welcomes pro rata treatment of curtailment.
- IWEA has serious concerns regarding proposals to remove compensation as these have a significant retrospective impact that is hugely material.
- Removing compensation of curtailment from wind generators is wholly discriminatory.
- The proposed decision is in contradiction to the recent Material Harm decision which clearly set out a number of triggers to monitor material harm to the consumer.
- The quantified impact identified and presented does not justify harm to the consumer.
- It is inappropriate to decide on one element of the redesign of the EU Target Model in advance of the market design project itself and in the absence of any holistic analysis required.
- IWEA believes that the IWEA position has not been sufficiently reviewed in this process as it clearly meets the requirements as set out including protection of the consumer.
- Should the Material Harm process trigger a review of compensation of curtailment, any removal of compensation should be linked to the delivery of curtailment mitigation measures such as the delivery of the DS3 programme.

IWEA requests that the SEM Committee make sufficient resources available to this workstream to ensure a decision is reached in a reasonable timeframe which gives due regard to the issues raised.

2. Introduction

The Irish Wind Energy Association ("IWEA") is Ireland's leading renewable energy representative body representing more than 250 members involved in wind energy development in Ireland and also in Northern Ireland, through NIRIG, set up in collaboration with RenewableUK. IWEA represents members with projects across the spectrum, in operation, under construction and awaiting connection. In Ireland IWEA members are involved in the majority of pre Gate 3 connected projects but also involved in more than 85% of the MW of contracted projects in Gate 1, 2 and Gate 3.

Through NIRIG we represent more than 25 company members that have developed over 85% of renewable generation operational in Northern Ireland today and who will contribute a significant majority of renewable energy required to deliver the 2020 targets.

The IWEA membership base includes all large, medium and many small developers as well as financial, legal advisory, consultancy, contractors and other service providers involved in the renewables sector in Ireland and Northern Ireland.

IWEA welcomes the publication of the Proposed Decision Paper on the Treatment of Curtailment in Tie-Break Situations and is pleased to see that some of the concerns outlined in our previous submission have been taken on board, in particular the acknowledgement that the grandfathering of curtailment will not allow sufficient build out of wind projects to ensure delivery of Ireland's 2020 renewable energy targets.

IWEA welcomes the proposal to curtail wind generation on a pro-rata basis, however we have serious concerns regarding the removal of compensation for curtailment of wind generation.

3. Curtailment Mitigation

As noted in our previous submission, and acknowledged by the SEM Committee in the proposed decision paper, there is an urgent need to advance progress on mitigation measures to minimise and reduce curtailment. Mitigation measures are crucial in realizing the full costs and social benefits of the investment in renewable energy. IWEA's position remains that all generators should be compensated for curtailment and we strongly resist any move to reduce or remove the levels of compensation to generators for curtailment.

In the years up to 2020 there are a number of key initiatives that are all underway which are required and indeed expected to deliver significant results in curtailment mitigation. These initiatives include:

- Increasing SNSP limit to 75%
- Decreasing levels of must-run generation
- Flexibility of conventional generation
- Effective operation of interconnectors to export at times of high wind

Post 2020 there are a number of key areas also which will also contribute positively to curtailment mitigation. These include:

- Further interconnection
- Storage
- Demand side management including electric transport and heating.

While some progress is being made with these initiatives IWEA is concerned with the lack of urgency on some mitigation measures and contends that the market must reflect and reward participants who provide services to facilitate renewables in line with the responsibility as set out in the RES-E Directive (Directive 2009/28/EC).

IWEA welcomes the RA's support for the DS3 programme, the East West Interconnector and the Demand Side Vision for 2020 as measures that will contribute to the mitigation of curtailment and proposes that an overall strategy that coordinates the implementation of all mitigation measures required to reduce curtailment should be developed. IWEA believes that a stronger emphasis should be placed on this area and that the regulators should play a more active role in ensuring that curtailment is mitigated as required by the RES-E Directive (Directive 2009/28/EC).

The RES-E Directive outlines a number of obligations on the member state to enable the integration of renewable energy and to minimise curtailment. Article 16.2(c) states:

> *Member States shall ensure that when dispatching electricity generating installations, transmission system operators shall give priority to generating installations using renewable energy sources in so far as the secure operation of the national electricity system permits and based on transparent and non-discriminatory criteria. Member States shall ensure that* ***appropriate grid and market-related operational measures are taken in order to minimise the curtailment of electricity produced from renewable energy sources****. If significant measures are taken to curtail the renewable energy sources in order to guarantee the security of the national electricity system and security of energy supply, Members States shall ensure that the responsible* ***system operators report to the competent regulatory authority on those measures and indicate which corrective measures they intend to take in order to prevent inappropriate curtailments****.*

The curtailment report required under the RES-E Directive being developed by the System Operators should provide detailed information on the levels of curtailment, the reasons for curtailment and the measures being taken to minimise curtailment. IWEA notes that the initial curtailment report for 2011 presented to the DS3 Advisory Council did not include such detailed information and requests that a more detailed report be made available to the regulators so the issue of curtailment can adequately be addressed. Such a detailed report could be used as a basis for an overall strategy and the development of incentives to ensure curtailment mitigation measures are introduced in a timely manner.

4. Comments on Consultation Paper

IWEA welcomes the recognition from the SEM Committee that linking curtailment to firm access is not appropriate and the risks associated with transmission reinforcement mean that Option 1 (grandfathering) would put the facilitation of the 2020 renewable targets at risk.

> *The conclusion drawn by the SEM Committee is that expected levels of connected firm wind generation in 2018 will not materialise until later, possibly even after the year 2020. The SEM Committee is not in a position to risk the achievement of this criterion on the delivery by the TSOs of sufficient firm capacity by 2020 given the real and potential delays to key transmission infrastructure projects (e.g. the second North-South Interconnector).*

4.1 IWEA Proposal

In our previous submission IWEA put forward a proposal as to how the wind industry considers curtailment should be treated. IWEA is still in favour of this alternative proposal and is concerned that there does not appear to have been much consideration given to the idea of a cap of generation to meet the 2020 targets. IWEA requests further consideration of this proposal which had been agreed following lengthy and detailed discussion with our membership and other stakeholders. While we welcome the proposal for pro-rata treatment of curtailment there remain concerns in the industry regarding the uncapped nature of curtailment. The IWEA hybrid solution, "Option 3b", as proposed in our previous submission represents an industry compromise position which importantly meets all of what we understand as the SEM Committee key objectives and strikes the right balance between addressing the curtailment issue and enabling the renewables industry advance in line with Government and EU policy & targets. We believe "Option 3b" proposed by IWEA can be supported by the SEM Committee and the industry as well as importantly providing the least impact on the consumer.

While it is noted in the paper that there will be an element of self limiting build out under the proposed decision, the additional risk imposed by this may introduce difficulties for project financing. There is considerable uncertainty around the potential levels of curtailment, including the impact of projects developed for export, delivery of the DS3 programme and interconnector use. The recent announcement of 800MW of offshore and tidal projects in Northern Ireland could have a significant impact on the curtailment levels in Northern Ireland.

In our previous submission IWEA proposed that the most appropriate means of both achieving targets while minimising costs to the customer, is a variant of the proposed Option 3. IWEA believes that the option of limiting the exposure of the generation required to deliver government targets to the potential for financial default from unpredictable future curtailment levels is the most appropriate.

The core principles of this option are as follows:

A. There should be a tranche of projects required to deliver the MW required to meet the 2020 targets in each jurisdiction independently, which would be curtailed for the operational lifetime

of the project on a pro-rata basis. These projects would be protected from higher curtailment as a result of further connections.

B. Any projects connected and exporting power by a cut-off date (no earlier than 1 January 2018 or at a later date if targets are unlikely to have been met by this time), will be in this first tranche.

C. This tranche could in principle grow in size, but in a controlled fashion as curtailment mitigation measures arrive such that its projects do not incur higher curtailment than would otherwise have been expected.

D. The treatment of new projects post the achievement of the 2020 targets will need to be defined at a later date.

E. Projects being developed explicitly for export should not add to the curtailment of projects that contribute to 2020 targets.

IWEA formed this position following lengthy and detailed discussion with our membership and other stakeholders and still believes that this option warrants serious consideration. This was put forward as a position that would allow the industry to move forward while at the same time providing some protection to uncapped levels of curtailment.

It is also important to note that this proposal offers protection to consumers in a number of ways through providing a hedge against unlimited build out of wind and hence uncapped curtailment, mitigating the cost and risk associated with not meeting the renewable energy targets and ensuring that substantial savings can be made through the merit order effect and the reduction in wholesale electricity prices.

4.2 Comments on the Proposed Decision

While IWEA welcomes the proposal for pro-rata curtailment of wind generation, we have serious concerns regarding the removal of compensation for curtailment. Our concerns are primarily regarding the timelines for implementation, the discriminatory nature of the proposal and the retrospective application of the changes. More information is required on the implementation of the proposal and the details that would be required around market changes.

4.2.1 Timelines

IWEA notes that the first implementation of this decision is not likely to be until 2017 as it is unlikely that 75% of the renewables target will be met by 2016. By this time the market is likely to have undergone a significant change to be compliant with the European Target Model. IWEA strongly believes it is inappropriate to make a decision regarding compensation for curtailment of wind energy without considering the whole market structure within which this decision will be placed. It is essential that in the development of a new market structure a holistic view of all the issues is taken to ensure appropriate treatment for all market participants.

4.2.2 Legal considerations

As stated above Article 16.2(c) of the RES-E Directive states

> *"Member States shall ensure that when dispatching electricity generating installations, transmission system operators shall give priority to generating installations using renewable energy sources in so far as the secure operation of the national electricity system permits and based on transparent and non-discriminatory criteria."*

In addition, the Proposed Decision needs to be in compliance with the rules of natural justice and the doctrine of legitimate expectation. It therefore follows that restrictions on payments due to curtailment must be non-discriminatory, proportionate and non-arbitrary.

In this regard we have serious concerns regarding the following elements on the Proposed Decision;

- The Proposed Decision appears on the face of it to discriminate against wind farm operators in that it is only they that will suffer the pro rata reduction in curtailment payments.
- The 2016 date for the commencement of proposed reduction in curtailment payments would appear to be arbitrary and cannot be aligned in all scenarios to the timing of the likely build out of renewable energy projects on the island of Ireland.
- The restriction on future payments to renewable energy projects already in operation is retrospective. Not only will this create investor uncertainty but it is also unjust and gives rise to concerns about the legitimate expectations of those operational wind farm generators.

4.2.3 Discrimination

This consultation proposes that compensation be removed for curtailment of wind generators only. IWEA has serious concerns regarding the discriminatory nature of this proposal by singling out one particular type of generation. There may be instances where there is curtailment of other types of generation for reasons of system security (i.e. in order to provide sufficient levels of reserve on the system one generator may be run ahead of a generator in the market schedule). In these instances would the generator which is not run or run at a lower capacity be compensated?

IWEA also notes that there are no proposals to remove compensation for any other priority dispatch generation. Similarly there is no proposal to remove compensation for interconnector trades in the event of curtailment. IWEA believes that if a generator is in the market schedule and if it is not run for any reason, then it should be compensated as per the current market rules.

In addition, the Trading and Settlement Code sets out a number of Code Objectives (Section 1.3 Code Objectives), one of which is to ensure there is no undue discrimination between persons who are parties to the code.

1.3 Code Objectives

The aim of this Code is to facilitate the achievement of the following objectives:

...

5. to ensure no undue discrimination between persons who are parties to the Code; and

...

For the above reasons, IWEA is of the view that the Proposed Decision runs foul of the principles set out in Article 16 of the RES-E Directive and should be reconsidered. It also appears to be contrary to the core objectives of the Trading and Settlement Code.

4.2.4 Retrospective Change

IWEA was shocked to see option 4 being brought forward by the SEM Committee during the previous consultation. The proposal to not compensate a certain class of generator that is in the market schedule but is not dispatched would be a fundamental redesign of the SEM principles and rules. This aspect of the structure of the market schedule was discussed in detail in the "Wind in the SEM consultation" where as recently as August 2011 the SEM Committee decided to not change.

> *"As there is no need for immediate action on this issue, and given the developments towards agreement on a target model for a European electricity market, no fundamental changes to the SEM High Level Design are envisaged in the interim period, unless such changes become clearly warranted on grounds of material harm as determined by the SEM Committee."*

Market compensation is provided when a generator is in the market schedule so that the system operators do what they need to do in terms of system services without impacting the generators in the market schedule. This is a fundamental design principle of the SEM.

IWEA has serious concerns regarding the retrospective nature of the Proposed Decision. There are a large number of projects that have already connected to the system or signed connection contracts for projects based on a market that provides compensation for curtailment. While it is acknowledged that there has to be scope for changes to a market, this change is so fundamental to the design that it will introduce significant investor uncertainty. There is particular concern for projects that are no longer entitled to support as compensation would be a significant portion of the revenue stream of these projects. The removal of compensation along with increasing levels of curtailment could have a significant impact on the finances of the project.

IWEA notes in the consultation paper that the SEM noted that introducing Option 4 (i.e. ceasing compensation immediately) would represent retrospective action on existing connected firm generation. This would, without equal compensation elsewhere in the market, detrimentally effect their financing arrangements and would harm regulatory and investment stability in the SEM. This recognition of the impact of removal of compensation on existing connected generation is welcome, however IWEA would also like to highlight strongly that the proposals now under consultation to phase out

compensation from as near as 2016, are also retrospective, and do not provide significant confidence to investors due to the timeframe of investments in energy projects.

The Trading and Settlement Code contains provisions describing how to amend its own terms through modification proposals. The Code sets out how modification proposals should be submitted, developed and approved. These processes need to be followed in relation to removing compensation and the principle of no retrospective effect is enshrined in such processes.

Finally we would state that it is a clearly established principle of the law of Ireland that legislation (including regulatory changes) act prospectively and not retrospectively. This principle was most succinctly stated by Judge Henchy in the 1982 case of Hamilton vs Hamilton as follows,

> "*Retrospective legislation, since it necessarily affects vested rights, has always been regarded as being prima facie unjust*"

IWEA would like to also make abundantly clear that the current proposals from the SEM Committee represent retrospective action on existing connected firm generation which is not only unjust but also impacts on these parties legitimate expectations. This would, without equal compensation elsewhere in the market, detrimentally effect their financing arrangements and would harm regulatory and investment stability in the SEM.

4.2.5 Market Design Impact

The proposal to not compensate a certain class of generator that is in the market schedule but is not dispatched would be a fundamental redesign of the SEM principles and rules. This aspect of the structure of the market schedule was discussed in detail in the wider "Wind in the SEM consultation" and as recently as the August 2011 decision the SEM Committee decided to not change the structure at this stage. Regulatory stability and certainty is key for any sector not only wind energy and this proposal resurfacing in a consultation paper having just been closed by the SEM Committee only a number of months ago is highly concerning for a sector with such significant potential looking to encourage investment.

In SEM-11-062 the SEM Committee noted that this issue was not a matter that merited immediate action. They stated that a review of the fundamental design features of the SEM may take place at some stage in the medium term in light of European electricity market target model progression however no fundamental changes to the SEM high Level Design were envisaged in the medium term regarding this issue. IWEA believes that the proposal to remove compensation would be a fundamental move away from this decision as it would involve a fundamental redesign of SEM principles and rules. IWEA also notes that the timeline for the introduction of these changes means that they will not be introduced until after the changes to align with the European Target Model, and it is wholly inappropriate to make a decision regarding one aspect of the market design, i.e. compensation for curtailment of wind energy, in advance of any consideration of the whole market structure within which this decision will be placed.

IWEA notes a commitment from the SEM Committee in SEM-12-105a (Implementation of the European Target Model for the Single Electricity Market - Next Steps Proposed Decision Paper) published on November 9th 2012 to maintain the current structure of the SEM and not to approve material market changes between now and 2016:

> ***SEM Design Stability to 2016:*** *We commit to maintaining the current structure of SEM until 2016 where possible and will not approve material market changes between now and then.*

The proposal to remove market compensation for curtailment represents material market change. IWEA notes the implementation date proposed would not be until 2016, however the intent of the statement is to ensure that no material market changes would be introduced outside of the delivery of the European Market Integration workstream.

4.2.6 Material Harm

IWEA notes that there has been previous consultation on the issue of Monitoring the Divergence of the Market Schedule from Dispatch and the Impact on Consumers. A decision paper (SEM-11-084) on this was published in October 2011 which stated the SEM Committee will monitor four constraint metrics (constraint payments, proportion of energy payment attributable to constraints, infra-marginal rents earned as a result of being constrained off and constrained running by volume (divergence)) along with reporting on the levels of curtailment that occur in the market. The SEM Committee would consider whether further analysis is required based on the monitoring and **this further analysis will be holistic and will take due account of the wider context and key external drivers.**

- *With the above in mind the SEM Committee has reached decisions regarding the ongoing monitoring of the market with a view to further analysis and reporting to industry. The SEM Committee will monitor the four constraint metrics proposed in the consultation paper along with reporting on the levels of curtailment that occur within the market. The SEM Committee will publish the above on an at least annual basis setting out the findings of the monitoring for the relevant period, the trends and indications of possible drivers for the changes/trends in each metric.*
- *The above publication will include a statement from the SEM Committee regarding whether it considers that further analysis is necessitated given the findings of this limited monitoring.*
- *If any further analysis is required it will be holistic and will take due account of the wider context and key external drivers such as requirements regarding EU target model compliance and requirements in relation to renewables.*

This raises the question as to the evident view that the current proposed decision now replaces the material harm workstream, a SEM Committee decision made as recently as October 2011. No reference is made in the current consultation paper to this or the linkage between the decision on material harm (which included a requirement for further holistic analysis before any proposed change) and the

proposal to remove compensation for curtailment under the current paper. IWEA would have concerns that this does not appear to have been taken into consideration and that the process for the reduction of constraint payments including curtailment has been identified should the need arise. It therefore makes little sense that another proposal is being put forward now in contradiction to the previous recent decision.

It is also important to note that the analysis carried out by the SOs shows that the DBC associated with curtailment of wind farms is not overly significant.

> *Looking at the short term impact, the results show a difference in DBC of €1.8 million between these two tie-break options, with Grandfathering giving the lower figure. It should be noted that this is within the range of accuracy for these studies. It would therefore be reasonable to say that* ***no discernible DBC saving*** *should be expected if the Grandfathering option were to be applied in the next tariff year.*
>
> *…*
>
> *The €13 million savings observed in this scenario (2020) are not overly significant in the context of the predicted DBC budget, and are expected to represent less than 10% of total DBC in 2020.*

SEM-11-084 outlined that further steps would be taken when the risk had been identified, however this risk has not been identified in the modelling work carried out by the SOs. IWEA strongly recommends that the procedure identified in the material harm paper be followed to ensure confidence in the regulatory process. The levels of DBC referred to in the proposed decision do not constitute material harm in the context of SEM-11-084 and therefore IWEA believes that a review at this stage is inappropriate.

4.2.7 Modelling assumptions

IWEA notes that the modelling work which was carried out for the analysis of Dispatch Balancing Cost and Curtailment is based on a significant number of assumptions and the basis of these assumptions is likely to change as the market develops and changes to comply with the European Target Model. It is understood that the modelling is carried out based on available information and based on the current market structure. The uncertainty around future market developments means that the findings of the modelling need to be considered in the context of future changes, and basing decisions on these results may not be appropriate.

Clarity is required on some of the assumptions used for the calculations on curtailment and the dispatch balancing cost. IWEA notes that more information will be required on the implementation of the proposed ruleset, however we note that the modelling for the dispatch balancing costs is carried out on the basis that curtailed wind is removed from the market schedule. This is recognised as likely to have the impact of increasing the SMP. IWEA notes that the impact on SMP has not been taken into consideration in the proposed decision. Our previous submission presented on overview of the impact on DBC, SMP and the PSO and we believe **that a holistic view of the different costs needs to be taken**

into consideration. Our analysis showed a net benefit to consumers of €42 million/year in 2020 for pro-rata versus grandfathering when a holistic view is taken into account.

The saving of €13 million referred to the in the proposed decision is compared to a case where compensation is paid for on availability and does not give consideration to the fact that only firm generation receives market compensation for curtailment. It is unlikely that all the generation in the market will be connected on a firm basis in 2020, therefore IWEA believes that the figure of €13 million is an unrealistic scenario.

The modelling used for the consultation assumes the same generation connection for all scenarios, however realistically there would be different build out rates for different options. For example, IWEA noted in our previous response that the likely build-out under Option 1 (grandfathering) would be considerably lower than that under Option 2. We noted that Option 1 would result in approximately 3983MW of wind generation on the island, approximately 744MW in Northern Ireland and the remainder in Ireland. This would correspond to only approximately 26% of electricity from renewable sources, well short of the required 40% target in both jurisdictions. We also noted that Option 2 would result in 5250MW on the island, enough to reach the target in both jurisdictions.

IWEA notes that the operational rules are assumed to be the same in 2020 as they are now, in particular in relation to system service requirements. IWEA believes that the reduction of minimum generation of must run plant is an area that requires progress between now and 2020 to minimise wind curtailment.

The carbon price floor in the UK has also not been taken into consideration in the modelling. This is likely to have the impact of increasing exports from Ireland to the UK and may further reduce curtailment levels.

In summary IWEA believes that any analysis to justify such a proposed decision to remove compensation from one particular generator requires that **a holistic view of the different costs is taken into consideration** with consideration for the changing environment for 2020 to ensure the analysis is robust.

4.2.8 Risk allocation

As stated in previous responses in the "Wind in the SEM" consultation process, IWEA believes that curtailment risk should at a minimum be shared by the wind industry and network operators and certainly not shouldered fully by the wind industry which has no control over the risk. As curtailment is a risk that cannot be managed by the developer, IWEA believes that compensation is appropriate. IWEA believes that the risk should be allocated to those who are best placed to manage it. The areas of grid code compliance of thermal generation, changes in grid code for all plant and the delivery of the DS3 program are beyond the control of wind generators. The flexibility of conventional plant also needs to be incentivised and enforced. IWEA notes that there is an ongoing review of system services as part of the DS3 program and welcomes this as the flexibility of the generation fleet will need to improve to ensure a more sustainable system going forward. While the system operators are leading on this, the regulators should also be playing an active role in supporting this work.

It is important to set out some of the myriad of issues and factors that will contribute to the curtailment of windfarms which are **outside the control of the windfarm developers**, and the reasons why placing further risk on wind generators is wholly inappropriate:

- Lost revenue due to curtailment was not taken into account in the calculation of REFIT or ROC price levels, i.e. compensation for curtailment was assumed to exist. These support structures would both need to be changed to reflect retrospective market changes if REFIT or ROC generators are to earn the revenues deemed appropriate by the respective Departments when designing those schemes.
- There is substantial uncertainty on future curtailment levels during the entire financing period for the windfarm. Uncertainty on curtailment levels will be a substantial impediment to financing windfarms and therefore meeting the Government renewable targets.
- Compensating for curtailment provides an economic signal for the implementation of the mitigation measures required as per the RES-E Directive. If the cost of curtailment can be centrally collected the appropriate market products to incentivise the mitigation measures will be easier to implement. Removing this signal will remove the incentive to address the wider issue of mitigation and the optimization of the investment in renewable generation.
- The issue of curtailment has been well flagged (refer to Garrad Hassan 2003 report[1] for the CER) so the delays in the implementation of mitigation measures cannot be excused.
- The Regulators decided to give interconnectors priority access over renewables in the August 2011 decision on the hierarchy for priority dispatch. While there is an expectation of efficient interconnectors this decision could result in higher curtailment levels for windfarms. As there is uncertainty on the effectiveness of interconnectors to facilitate export flows during times of high wind generation the additional level of curtailment cannot be quantified at this stage but the risks are substantial.
- Also as part of the hierarchy decision it was decided that some non-renewable generators would not be de-committed, i.e. be turned down to zero output during times of high renewables. This includes peat and hybrid plants. Questions have been asked if this is in conflict with the RES-E Directive requirements and not withstanding that this decision will result in higher curtailment for windfarms.
- The DS3 programme to increase the instantaneous SNSP limit from 50% to 75% has already been delayed. The risk to delay currently only rests with wind generators who are not in a position to manage the risks.
- There does not appear to be a robust and transparent work programme to reduce minimum generation levels for conventional generators and the appropriate market mechanism to encourage new generators with low minimum generation levels with high inertia. It appears that the level of minimum conventional generators could be a major contributor to curtailment levels.

[1] http://www.cer.ie/GetAttachment.aspx?id=abd2c93a-3227-44c0-b0ef-bc57acbb1114

- The processing of requests for grid code derogations has been slow, so generators are unsure if they have been accepted or not. The impact of derogation requests on renewable generation should be taken into consideration when assessing derogation requests. There may be derogations given to generators that result in high curtailment levels for wind generators.
- There is no overall strategy for the mitigation measures to reduce curtailment levels in the medium and long term. Uncoordinated work is ongoing in a large number of areas.

As stated previously, the analysis carried out by the SOs shows that the DBC associated with curtailment of wind farms is not significant. SEM-11-084 outlined that further steps would be taken when the risk had been identified, however this risk has not been identified in the modelling work carried out by the SOs. IWEA notes that should the triggers for a review of material harm be reached, there may be merit in looking at methodologies to share the risk among developers and those who are in a position to manage it. For example, any reduction in compensation could be linked to the successful delivery of the DS3 programme and other curtailment mitigation measures. Any such proposals would require further consultation as to the most appropriate way to manage the risks rather than placing the whole burden on wind generators.

Relating Reduction of Compensation to Curtailment Mitigation Measures

IWEA acknowledges the principal objective of the SEM Committee to 'protect the interests of customers of electricity in the State and Northern Ireland...wherever appropriate by promoting effective competition'[2]. However it is IWEA's strong belief that the reduction of compensation as proposed by will do little to reduce the burden on consumers. For a given level of curtailment, any reduction in market payments resulting from the removal of compensation in the short term will still be paid by customers in ROI through the PSO levy, as the REFIT floor price will still be in place and any difference between market revenues and the REFIT floor price will be picked up by the PSO levy. Depending on how the decision is implemented the SMP could actually increase if there is a change to the market schedule resulting in an increased net cost to the consumer which, in fact, would not protect the interest of customers in Ireland and Northern Ireland.

If the market revenue increases above the REFIT floor price over a settlement period, then the signal to the market should be to increase wind generation on the system and thereby reduce the wholesale electricity price, rather than to reduce the investment in wind energy.

The impact of the savings to the consumer resulting from a reduced wholesale price of electricity needs to be considered. In order to promote the development of wind energy, investor confidence needs to be maintained and the proposed decision will severely impact projects which have financed projects on the basis that compensation for curtailed energy would be paid. Erosion of investor confidence will result in a lower build out of wind energy projects which will result in the predicted savings in the wholesale electricity market not being achieved. This impact needs to be given due consideration when

[2] Electricity Regulation Act 1999, Section 9BC(1)(c)

considering the cost to consumers. **Previous analysis presented by IWEA has shown the significant benefits of wind energy in terms of overall saving to the consumer under the current market rules.**

Having stated our position that we strongly believe there should be no reduction in compensation for wind generators that are curtailed, we acknowledge that the SEM Committee still has concerns regarding the cost to the consumer. In that respect the paper on material harm should be referred to. IWEA notes that should the triggers for a review of material harm be reached, there may be merit in looking at methodologies to share the risk among developers and those who are in a position to manage it.

One possible solution should material harm be evident, and a reduction in compensation be considered, is that any compensation reduction be linked to the successful delivery of the DS3 programme, the reduction of minimum generation of must-run plant and other curtailment mitigation measures. This would limit the exposure to the customer as compensation payments would be reduced in the long term, however it also ensures that the risk is not entirely placed on wind generators who are not in a position to manage that risk and that there is continued focus on the success of the DS3 programme and other mitigation measures. This would allow more certainty in financial models, knowing that compensation would only be removed only if curtailment levels are reduced, thereby improving the bankability of projects. Any such proposals would require further consultation as to the most appropriate way to manage the risks rather than placing the whole burden on wind generators, and this is allowed for under the material harm decision paper.

The wind industry has been very supportive of the DS3 programme to date through representation on the Advisory Council and the Joint Grid Code Review Panel, attendance at public fora and regular meetings with the system operators. IWEA has recognised the work being carried by EirGrid in this regard and is keen to see the programme progress. In particular the wind industry has supported the grid code modifications which we believe will enable higher levels of non-synchronous generation on the electricity system. It is essential that other generators and stakeholders play their part in exploring the system's changing needs and designing measures to reduce the levels of curtailment of renewable generation as required of Member States under the RES-E Directive. **While we recognise that it is difficult to incentivise delivery of the DS3 programme, penalizing wind generation is not the solution.** Consideration should be given to methods for incentivisation of the delivery of curtailment mitigation measures, including the DS3 programme.

IWEA believes that Demand Side Management will also be able to play a role in the mitigation of curtailment and supports the regulators in the progression of the Demand Side Vision to 2020. Demand side management provides opportunities to change the demand profile according to the price of electricity generation so that loads can be moved from times of low availability and high prices to times of high availability and low prices. This forms another part of the holistic view of the energy system and it is important that there is a platform for the interactions of different stakeholders to work together to deliver the best value to consumers.

4.2.9 Implementation of the proposed decision

Notwithstanding our position stated above, IWEA members have concerns over the implementation of the proposed decision paper. There are a number of factors that would require further consideration before the proposal could proceed and the impact of these would need to be carefully examined before a final decision could be made.

- Would the market schedule be changed so that curtailed wind would be removed from it? Have the implications for SMP as a result of this been considered? If curtailed wind is removed from the Market Schedule it is likely that this would lead to an increase in Scheduled Demand and therefore an increase in SMP over and above the level if it was left in the Market Schedule. This may actually increase the cost to the consumer.

- The impact on capacity payments would also need to be considered. Our understanding is that there would not be an impact on capacity payments as these are paid on availability, but this would need to be verified and analysis would need to be carried out to ensure there is no impact. Capacity payments should be unaffected with reference to the CPM Medium Term Review Final Decision.

- The Trading and Settlement Code contains provisions describing how to amend its own terms through modification proposals. The Code sets out how modification proposals should be submitted, developed and approved. These processes need to be followed in relation to removing compensation and the principle of no retrospective effect is enshrined in such processes.

4.2.10 Investor certainty

As noted above the proposals in this paper are intended to only begin to take effect from 2016. This aligns with the timeframe for the introduction of a new market on the island of Ireland which is to be compatible with the European Target Model. The current REFIT 2 support scheme is only open until 31st December 2015, while there is also significant uncertainty around the ROC regime in Northern Ireland. These factors combined make the investment framework for renewable generation very uncertain in the coming years. Making a decision at this stage to remove compensation for curtailed wind generation further erodes the investor certainty.

The amount of time that has been devoted to this consultation process is an area of significant concern. The wind industry is now in a situation where there is a small window of opportunity for project development between publication of the constraint reports and the closing of the REFIT 2 support scheme at the end of 2015 (financial institutions will require a buffer of 6-12 months). IWEA requests that the regulators make sufficient resources available to this workstream to ensure a decision is reached in a reasonable timeframe which gives due regard to the issues raised.

While the sliding scale of compensation is better than compensation being removed at the outset, there is no doubt that it will still have a significant impact on wind farm finance. Market arrangements are

considered for the lifetime of a project which will extend well beyond 2020 for the projects connecting in the coming years. While the proposed option provides a reprieve for a couple of years, it is unlikely to significantly increase the levels of investment.

4.2.11 Questions for stakeholders

See below for the IWEA responses to the particular questions posed in the consultation paper. However the responses outlined below should be read in conjunction with our overall submission which provides more detail to support the key points raised.

Do you agree with the proposed decision of the SEM Committee? If not, please set out your reasons why and with reference to the five criteria identified above.

IWEA welcomes the proposed decision that curtailment be allocated on a pro rata basis however we strongly oppose the proposal to reduce and remove the levels of compensation to generators for curtailment. IWEA believes the proposed change to remove compensation is both retrospective and discriminatory, and the introduction of material changes to the market at this time is not appropriate or necessary. IWEA would also like to re-iterate that our previous submission "Option 3b" met all of the five criteria identified by the SEM Committee in the previous consultation.

Notwithstanding our position as set out above, IWEA would like to provide the following comments in relation to the five criteria identified as requested by the proposed decision paper.

Assessment criteria

	Assessment Criteria	Comment	Rating
1.	Impact on the consumer and Dispatch Balancing Costs (DBC)	IWEA notes that the analysis carried out by the SOs shows that the DBC associated with curtailment of wind farms is not overly significant, therefore the proposal to remove compensation for curtailment is in no way necessary or appropriate. IWEA notes that the proposals needed to be examined holistically to ensure all impacts, such as the impact on SMP, and other costs and benefits are taken into consideration.	
2.	Facilitation of Ireland and Northern Ireland 2020 Renewable Targets	IWEA believes that this option will not provide the regulatory certainty required in moving forward to reach targets. Introducing retrospective change of any description, even of lesser significance to that of this proposal, is enough to erode investor confidence in the regulatory regime of a Member State.	
3.	Efficiency of Entry Signal	Regulatory uncertainty does not provide an efficient and stable investment environment for new entrants.	

4.	Stable Investment Environment	The removal of compensation would be seen as a retrospective step which reduces investor confidence. This is seen as a fundamental redesign of the SEM principles and rules. While the sliding scale of compensation is better than compensation being removed at the outset, there is no doubt that it will still have a significant impact on wind farm finance. Market arrangements are considered for the lifetime of a project which will extend well beyond 2020 for the projects connecting in the coming years. While the proposed option provides a reprieve for a couple of years, it is unlikely to significantly increase the levels of investment.	
5.	Consistency of treatment for constraints and curtailment	The proposed ruleset as a proxy should provide clarity on the treatment for constraint and curtailment that is not there today.	

Do you consider that the proposed decision has been clearly defined? If not, could you please provide comment on how this could be addressed, including the outline of the *defined curtailment limit?*

While the intent of the proposed decision appears to be clear there seems to be a lack of understanding of the implications of the proposal to remove compensation for curtailment. As outlined above IWEA welcomes the pro-rata treatment of curtailment however believes the proposed removal of compensation for curtailment is both retrospective and discriminatory, and the introduction of material changes to the market at this time is not appropriate or necessary.

Do you find the proposed rule-set for the differentiation of curtailment events from those of constraints amenable? If not, please set out why. In addition, could you please provide additions/modifications that could be made to the rule-set for to facilitate differentiation?

The proposed ruleset for the differentiation of curtailment events from those of constraints seems to be amenable, however IWEA notes that there is reference to a possibility that this ruleset could be changed at some stage in the future:

> *While this approach may be reasonable at the current point in time, in the future, with potentially differing levels of service provision and contribution to system stability from different wind generation units as technology evolves, this may need to be further examined to determine its continued feasibility/ appropriateness*.

IWEA questions if this opening would add further regulatory uncertainty while noting that any such changes would require consultation with market participants to ensure clarity and transparency around any proposals that may be put forward.

5. Conclusion

IWEA welcomes the SEM Committee proposed decision that curtailment be allocated on a pro rata basis however we strongly oppose the proposal to reduce and remove the levels of compensation to generators for curtailment. Such a retrospective change would be very damaging to investor confidence and undermine any confidence in a stable policy framework.

Our response has highlighted a number of concerns regarding the Proposed Decision and these are outlined as follows:

- IWEA welcomes pro rata treatment of curtailment.
- IWEA has serious concerns regarding proposals to remove compensation as these have a significant retrospective impact that is hugely material.
- Removing compensation of curtailment from wind generators is wholly discriminatory.
- The proposed decision is in contradiction to the recent Material Harm decision which clearly set out a number of triggers to monitor material harm to the consumer.
- The quantified impact identified does not justify harm to the consumer.
- It is inappropriate to decide on one element of the redesign of the EU Target Model in advance of the project itself and in the absence of any holistic analysis required.
- The IWEA position has not been sufficiently reviewed in this process and clearly meets the requirements as set out including protection of the consumer.
- Should the Material Harm process trigger a review of compensation, and removal of compensation should be linked to the introduction of curtailment mitigation measures such as the delivery of the DS3 programme.

IWEA requests that the regulators make sufficient resources available to this process to ensure a decision is reached in a reasonable timeframe which gives due regard to the issues raised.

In conclusion we would like to thank the SEM Committee for the opportunity to engage on this issue as this consultation is of particular importance to the wind industry given the significant implications it has for the viability of the sector. We believe “Option 3b” as set out in our previous response can be supported by the SEM Committee and the industry as well as providing the least impact on the consumer. We welcome the SEM Committee proposed decision that curtailment be allocated on a pro rata basis however we strongly oppose the proposal to reduce and remove the levels of compensation to generators for curtailment.

Given the seriousness of the issues presented, IWEA would like to request a meeting with the SEM Committee to discuss our response in more detail.