



**Response by Energia to the Regulatory  
Authorities Consultation Paper SEM-11-063**

***Treatment of Price Taking Generation in Tie Breaks in  
Dispatch in the Single Electricity Market and  
Associated Issues***

**14 October 2011**

## **1. Introduction**

Energia welcomes this opportunity to respond to the SEM Committee consultation paper SEM-11-063 on the Treatment of Price Taking Generation in Tie Breaks in Dispatch in the Single Electricity Market and Associated Issues. Energia is an active member of IWEA and has contributed to its response on this issue. Where Energia supports IWEA views this is made clear in this response. Energia in particular brings to bear in this response its considerable experience of project financing and its knowledge of the SEM in suggesting the most appropriate way forward.

## **2. Executive Summary**

The detail of how tie breaks are handled in practice has significant financial consequences for the generators in question and has important implications for achieving renewable targets and for doing so in an efficient and cost effective manner. In this context the Managing Director of Energia Renewables, Peter Baillie, wrote to the Regulatory Authorities (RAs) on 26 September 2011 (see copy in appendix 1) to raise serious concerns about the significant lack of fundamentally important information that was not provided in SEM-11-063. Energia acknowledges the clarification note SEM-11-086 since published by the RAs on Wednesday 12 October 2011 and the extended deadline of Friday 14 October in which to respond. This shows recognition that more information was needed in order to provide a meaningful and considered response to SEM-11-063. However clarification note SEM-11-086 still leaves many important questions unanswered and indeed provides information that only raises further questions and adds to our serious concerns in respect of the proposed pro rata treatment of curtailment, definition of constraint groups, and proposed differential treatment of constraints and curtailment, specifically:

- Importantly we note from SEM-11-086 that it is not always possible to distinguish between constraints and curtailment. Given this confirmation, it is highly inadvisable to implement a different approach to dispatch of constraints and curtailment.
- There is no definition of the proposed constraint groups in NI or RoI. To the extent that a different rule set would apply for dealing with constraints outside the specified constraint groups area it is essential to have a definition of the constraints groups and how constraints outside these specified areas would be dealt with. We note from clarification note SEM-11-086 that significant analysis is needed to define the exact detail of the constraint groups and that it is only practically possible to manage three constraint groups in total in real time dispatch.
- We note that no definition of Firm Access or Firm Access Quantities (FAQs) exists for NI, and that this will be subject to further consultation. We are particularly concerned at the lack of modelled constraints and curtailment projections for NI. This is a serious information gap in assessing the consequences of the proposals.

- We note the response in SEM-11-086 regarding the treatment of the north south tie-line as a constraint or curtailment, which it is suggested would depend on a number of factors in both jurisdictions at the time. However it concludes that if there was no constraint group with respect to this issue, the dispatch order would be in the manner so best to address the security issue on the system. It is not at all clear what this means. Again we would suggest it is fundamental to understand this issue particularly if a pro rata approach is applied to curtailment or to areas outside the proposed constraint groups.

Others, including IWEA, have also raised numerous information requests to Eirgrid and SONI during the consultation period but many questions, including those above, remain unanswered. In the absence of required information there is no way to quantify the impact of the proposed decisions, and **there is a very significant danger of unintended consequences arising from decisions made in the absence of critical definitions and basic information**. Noting the informational gaps highlighted above, Energia's response makes the following key points:

1. **Bankability should be a key consideration** - It is critically important to ensure that decisions made now which are primarily designed to address expected future issues should not render viable current projects unbankable. Lenders and investors can take a view on financial impacts where the effect can be quantified and where the impact can be capped or estimated by experts. Where impacts are unquantified and uncapped projects will be unbankable. And if current projects cannot be banked this will undermine future projects from a financing perspective.
2. **We oppose pro rata curtailment and support adopting the same approach for dealing with both constraints and curtailment thus enabling investment required to achieve renewable targets, doing so in an efficient and cost effective manner, and avoiding unnecessary complexity, diversion of resource, and focus on the root cause of the problem**. Energia is strongly opposed to the proposed pro rata basis for dispatching wind down to relieve curtailment issues. From an investment perspective, there is no available reasonably accurate projection of the levels of curtailment or its financial consequences for new generators and without this pro rata treatment would be unbankable. From a consumer perspective it is clear that pro rata curtailment will be more expensive as firm wind generators that are curtailed will have access to the market schedule and will receive market price compensation. In contrast non firm wind generators only have access to the ex post market schedule to the extent that they are dispatched in real time and therefore will receive no market compensation when curtailed. Energia has project financed 5 windfarm construction projects and re-financed 5 operational windfarms in the last 2 years, including projects on both sides of the border. Our most recent financing closed on 31 May 2011, and we remain active in the financing markets for 100MW of projects to commence construction in the first half of 2012. With considerable current experience of project financing and the market it is Energia's considered view that curtailing non firm wind first and curtailing firm wind last would minimise

cost to the consumer whilst incentivising projects that can connect and achieve firm access most quickly to get built. Such projects will be bankable as there will be a buffer of non firm projects to take curtailment before them, and this will mitigate to some degree the potential uncapped exposure to curtailment which would arise from pro rata treatment. Adopting the same approach to constraints and curtailment will provide the best way to maintain project financeability, will minimise the cost to the consumer, and will avoid distractions from focusing on the key goal of minimising constraints and curtailment.

3. **In principle Energia supports the proposed high level approach for constraining price taking wind generation, which seeks to constrain various categories of non compliant and non firm generators first, leaving firm access generators to last** – this should help minimise constraint costs to the consumer because firm generators receive market compensation when constrained, whereas non firm generators do not. However Energia is of the view that where temporary connections achieve firm status, they should be treated as having firm access for the application of constraints, and not be constrained along with non firm capacity.
  
4. **Constraint categories should relate to the bankability of projects** – setting arbitrary levels of FAQ may be easier to implement but their impact is unquantified and uncapped and would therefore be unbankable. Energia proposes that after Firm Access, a category should be set up in both NI and RoI, which includes those projects that can have a constraint expectation of 5% at their node for a period of time. This is a level which can be managed from a bankability perspective. It should be noted that a 5% reduction is a significant revenue loss for projects. This effect is also magnified in NI where revenue loss includes loss of ROCs and LECs. The third category should then include all other non firm windfarms. As projects progress from the 5% grouping to firm access category, other projects should move up from the non firm grouping. The objective of this approach is to have a category of projects that can be financed at any point in time. Non firm projects with strong wind factors may also be able to get financed on the basis of a sufficient buffer to allow for conservative views of constraints and curtailment, but marginal projects will need to wait until they can get into the 5% grouping before they will have an opportunity to get financed and to get built and connected. Eirgrid have recently acknowledged to IWEA that it may be possible to model a 5% grouping. They would be open to dialogue on this, whilst recognising that this goes further than their current objective of providing estimates of constraints for various levels of FAQ. Ensuring ready to build projects are financeable is of the utmost importance, and Energia firmly believes that a grouping with an expectation of 5% constraints would significantly help the financeability of projects.
  
5. **A single set of rules should apply to all price taking wind generation regardless of location** – SEM-11-063 proposes that three constraint groups will be modelled on the island of Ireland. The TSOs advise that the most impacted areas are in the south west and north west of RoI and the north west of NI.

These groups have not been defined at this stage, but will form the 'constraints list'. The firm access hierarchy approach outlined in the paper will only apply to the constraint list areas or zones. It is not clear from the consultation paper, clarification note SEM-11-086 or from IWEA and NIRIG discussions with Eirgrid and SONI how projects outside these list areas would have constraints applied to them. Energia would be extremely concerned if a pro rata basis was to be considered. As indicated above, Energia would advise that this would make projects outside the constraints list areas unbankable, as there is no information available from which to assess the level of constraints or their financial impact. We have received conflicting information about this from our discussions with the RAs where it was explained in a recent meeting that three zones would cover the island of Ireland, and not just three specified areas. Energia reiterates the danger of adopting a different priority ranking within a constraint list area versus outside it. Where the tie break rules differ such that financial consequences of constraints differ on the basis of whether a project is located within a zone or outside it, there are potential grounds for discrimination claims, and there is a lack of flexibility to allow the TSOs to move generators in and out of zones as the network develops. It is Energia's considered view that a single set of tie break rules for constraints should apply within the zones and outside them. The impact may then differ due to the grouping of projects within a zone, but the same ranking rules should apply if a project was in or out of the zone. In our view this is the most pragmatic way to proceed, with a single set of rules applying for all price taking wind generators, regardless of where they are located.

6. **A special case is needed for 5-9.9MW generators that will now be controllable but (because they are de minimus) will not be eligible for market compensation when constrained off** – these windfarms have entered into de minimus contracts with supplier intermediaries and cannot change these to go into the market without lender and supplier consent. Energia strongly suggests that this category should receive market compensation even though they are not in the market schedule.
  
7. **How curtailment will be applied in Excess Generation Events (EGEs) is unclear** - Energia would suggest this needs further explanation and consideration. SEM-11-063 seems to imply that pro rata curtailment would apply in an EGE but that would mean firm access generators effectively being penalised by a negative PFLOOR whilst non-firm generators, dispatched down and not in the ex post market schedule, being protected from negative PFLOOR. This would be a perverse outcome to penalise firm access generators who have been able to connect to the network on a firm access basis, whilst not penalising a non firm access generator who has connected before the deep works have been completed. Energia is aware that PFLOOR is consulted upon annually, but does not agree that negative PFLOOR creates a meaningful investment signal to stimulate demand side activity. Demand side investment would be better stimulated through ancillary services contracts, rather than an unpredictable, uncertain and volatile revenue stream.

8. Curtailment should be recognised as a long run problem that will have to be addressed by the TSOs, and the wider industry and we understand Eirgrid's DS3 project on delivering a secure, sustainable power system will aim to address it in various ways through ancillary services developments and otherwise. In the meantime renewable targets will only be achieved if existing viable projects go ahead and our suggested approach outlined in this response should help to ensure this at least cost to the consumer. Pro rata curtailment will cost more, will not deliver renewable targets, and is not the solution for curtailment. Applying the grandfathering principle to both constraints and curtailment using firmness and date order as a proxy is furthermore justified on the basis that the frequency and severity of these events is clearly made worse by wind generators connecting to the system when the system cannot accommodate them. There is also a very significant queue of wind projects awaiting connection offers and planning beyond what is already consented or have connection offers.
  
9. Energia recognises that the best way to tackle constraints is to ensure that network development is properly resourced and is aggressively pursued. Energia's view is that the rules for tie breaks for price taking wind generators are a temporary solution that is necessary until the network is built out. However with the potential for considerable future wind projects beyond gate 3 and NI projects with planning and accepted connection offers, there is a significant volume of new entrant wind projects in the queue. This is likely to mean the rules for tie break treatment of constraints will be required for many years to come and it is important to get it right, avoiding unintended consequences.

The remainder of this response provides detailed comments to both SEM-11-063 and the accompanying high level decision paper SEM-11-062.

### 3. Detailed Comments

#### Hierarchy

##### Interconnectors

Energia notes that the hierarchy for dispatch published in the decision paper has not been consulted upon. The proposed list is materially different from what was included in the previous consultation. Energia has concerns that Eirgrid, as the owner of an interconnector, has a significant role in preparing and justifying the hierarchy list, and we believe that this may not be appropriate.

The TSOs have suggested a hierarchy that will favour interconnection access to the system. With the introduction of 500MW additional interconnection through the east-west interconnector, it does not seem appropriate that the hierarchy is led by the TSOs and an impact assessment should be carried out to highlight how this proposal could affect all market players. By proceeding with this hierarchy the precedent set needs to be considered as this may have implications for the market even after the introduction of a new European target market.

We understand that Regulation (EC) 714/2009 on cross-border exchanges in electricity prevents a TSO from interfering with interconnector flows except for system security reasons. However in parallel with that obligation, a separate governing instrument, Directive 2009/28/EC as transposed in Ireland by S.I. No. 147 of 2011, obliges the TSO to dispatch wind within Ireland in priority to power generated from any other source, again subject only to system security requirements.

Energia agrees with the IWEA view that wind energy should have priority over the interconnector as the promotion of renewable energy is essential if Ireland is to meet its renewable energy targets. Also from an asset owner perspective you have two long term investments in power - interconnection and wind - and one is given preferential access. There has been no justification for hierarchy that has been submitted and this should be provided along with the merits of different hierarchy permutations.

The TSOs have also outlined that there are options for counter-trading. This solution could allow for a possible reduction in the imperfections pot and facilitating wind energy through less curtailment and possibly less constraints. Accepting the potential merits of this solution there would need to be a lot more clarity as well as industry engagement on this.

It does however need to be clarified if the TSO counter trading only occurs during a tie-break situation between wind and interconnection. If this could happen in other situations that could influence the market schedule or usage of plants then this should be consulted upon. Transparency and regular reporting of counter trading by the TSO, as with all constraint decisions, is essential in order for market participants to see the benefits of this process.



Energia agrees with IWEA's concern that the hierarchy will be reviewed when appropriate. This contributes to uncertainty within the industry and Energia would like this further clarified.

In summary, Energia considers that wind generation should be given higher priority than interconnectors. Curtailing wind, which is effectively zero or very low cost green energy, for non-renewable and more expensive energy flows across the interconnector seems illogical.

Should the merits of the proposed solution stand up and demonstrate that it does allow for a possible reduction in the imperfections pot and facilitate wind energy through less curtailment and possibly less constraints, there would need to be a lot more clarity on the proposal as well as industry engagement on this proposal.

### **Sub 10MW generation**

Currently projects in the 5-9.9MW must be controllable but can choose whether to trade through the SEM or not. However, 5-9.9MW generators which have entered into REFIT contracts in Ireland with a supply company are not able to make a choice to elect to participate in the market. Participation in the market can only be by agreement with suppliers. Suppliers have generally entered into these contracts on the basis of de minimus plant, outside the market, which are netted off supplier demand. Therefore independent generators may not have the option to elect to be traded through the pool. This is a big issue for independent generators. Those that do not trade through the pool do not get compensated in the market when they are constrained/curtailed, even if they have a firm access. This is clearly discriminatory against what tends to be smaller independent generators. The consultation paper does not distinguish between different levels of controllable wind farms and proposes to treat all controllable wind farms equally. However, as proposed, the 5 – 9.9MW windfarms will not be treated equally, unless they also receive compensation in accordance with their level of Firm Grid access.

In summary, Energia agrees with the IWEA response on this issue and support this proposal as this is most likely to be an issue when there is a lot of wind on the system and prices are low and so agree with the proposal to treat all controllable wind farms equally. However the market mechanism need to be put in place so that those generators in the 5-9.9 MW range which are outside the market are eligible for compensation. Following discussions with SONI it is noted that wind farms between 5 and 10MW in NI are controllable but they are not dispatchable under the NI grid code. This is different to the situation in Ireland where all wind farms above 5MW are dispatchable. The difference in approach between the two jurisdictions would need to be addressed to ensure fair treatment of generators across the island.



## **Not decommitting non-renewable generation**

It is proposed in SEM-11-063 that in tie-break situations between generators qualifying for priority dispatch, non-renewable generators (including Peat) should be dispatched down to the minimum generation level rather than to zero output/decommitted.

Energia strongly considers that renewables should be given clear priority over non-renewables in tie-break situations between plant qualifying for priority dispatch and that non-renewables should be decommitted before renewables are dispatched down. There is no reason why non-renewable generation should be maintained at minimum generation levels except to provide system security. In the event that it is not possible to decommit all non-renewables for reason of system security, all renewables should be compensated for curtailment.

## **Constraint lists and groups**

In the absence of information relating to the projects included in each group and the associated constraints lists it is extremely difficult to comment on this approach as it is unclear how this will work in practice. Questions remain around how much generation might be included in a particular group and list and the likely levels of constraint that will be experienced within a group. Energia has noted in the introduction and executive summary that there is lack of critical information and that this is a serious impediment to giving informed views. Energia requests that the information on what wind farms fall within each group and constraint lists should be published through the appropriate regulator.

Energia shares IWEA's concern that the solution being offered is constrained by existing systems and that any solution would need to ensure no additional resources. In the RES-E directive there is a requirement to reduce constraint/curtailment through priority dispatch of renewables. With additional resources it could be possible to expand the number of constraint areas and number of categories. Therefore Energia supports IWEA in proposing that solutions involving additional resources be investigated in the context of the RES-E requirement to reduce constraint/curtailment.

In summary Energia supports the principal of constraints groups and lists, however more information is required as to what projects are included, how the areas are defined and the potential to change over time before an informed position can be developed.

Energia would be concerned also around the modelling of the constraint reports as suggested at the Gate 3 Liaison Group. It is vital that the modelling as closely as possible reflects the proposed decision and that this is also followed through operationally.

SEM-11-063 proposes that three constraint groups will be modelled on the island of Ireland. The TSOs advise that the most impacted areas are in the South West, the North West and North West of Northern Ireland. These groups have not been defined at this stage, but will form the 'constraints list'. The firm access hierarchy approach outlined in the paper will only apply to the constraint list areas or zones. It is not clear from the consultation paper, clarification note SEM-11-086 or from IWEA and NIRIG discussions with Eirgrid and SONI how projects outside these list areas would have constraints applied to them. Energia would be extremely concerned if a pro rata basis was to be considered. As indicated above, Energia would advise that this would make projects outside the constraints list areas unbankable, as there is no information available on which to assess the level of constraints or their financial impact.

We have received conflicting information about this from our discussions with the RAs where it was explained in a recent meeting the three zones would cover the whole of the island. Energia reiterates the danger of adopting a different priority ranking within a constraint list area versus outside it. Where the tie break rules differ such that financial consequences of constraints differ on the basis of whether a project is located within a zone or outside it, there are potential grounds for discrimination claims, and there is a lack of flexibility to allow the TSOs to move generators in and out of zones as the network develops. Energia is of the view that a single set of tie break rules for constraints should apply within the zones and outside them. The impact may then differ due to the grouping of projects within a zone, but the same ranking rules would apply if a project was in or out of the zone. In our view this is the most pragmatic way to proceed, with a single set of rules applying for all price taking wind generators, regardless of where they are located.

The implications for projects outside the proposed constraint groups would have to be modelled and understood if such proposal were to be workable. In the absence of reliable projections information there is a high potential for financing failures.

It is vital that what happens operationally, and how it is modelled are in sync otherwise the market could be faced with the area of constraint management being non transparent with a lot of volatility and related uncertainty in the market.

### **Fixing the constraint groups**

Energia supports IWEA's position on fixing constraint groups.

The consultation paper states that issue of tie-breaks where choices can be made between price-taking generators will be kept under review in the context of network development and the advent of new non wind price taking generation plant on the all island system. Energia supports IWEA's concern that this contributes to uncertainty regarding how enduring this solution might be. Changing the basis of constraints 'no more frequently than once per annum' will lead to unacceptable volatility risk.

The potential volatility of changing constraint groups will negatively impact investment decisions and bankability assessments. Most renewable generators use project finance, and potential volatility as proposed could trigger project default, and will lead to conservative worst case assumptions being made by lenders. This would undermine broader investor confidence.

In summary Energia supports IWEA in proposing that once a constraint group is defined it should stay fixed. The group should cover the nodes that are included in the lists as this leads to greater transparency. It is accepted that the lists will change as deep reinforcements are done and more projects connect to particular nodes but constraint group boundaries and the nodes should stay fixed because:

1. Volatility and lack of predictability will at best reduce project debt capacity and at worst make projects unbankable.
2. It is vital that the modelling as closely as possible reflects the decision and that this is also followed through operationally. Fixing the boundaries of the constraint groups and the nodes within will aid in this requirement.

It is vital however that there is efficient development of the energy infrastructure on the island to resolve the ultimate cause of constraint and curtailment.

### **Constraint categories**

Energia has participated fully in assessing the position on this with IWEA and agrees with IWEA's position on constraint categories, largely repeated below. Energia has added some further detail on how a limited constraints category would be identified.

Energia understands that this is an all island consultation and the SEM Committee is keen to find a solution that can be implemented in both jurisdictions. In the absence of a connection policy in Northern Ireland that provides the methodology for the application of firmness and the levels of firmness of a given project it is very difficult to comment on the appropriateness of this method. Energia notes that there is due to be consultation on connection policy this Autumn and this will go some way toward providing this policy. However, this information is not available in the context of the current consultation, making it extremely difficult for generators in Northern Ireland to examine the impacts of the current proposals.

The three categories of 0 – 33%, 33 – 66% and 66 – 100% firm have been proposed in the consultation. Eirgrid proposed that access could be split into 3 groups, and have indicated that they have no preference as to what these groups are. We understand that the SEM Committee is keen to use the same categories in both jurisdictions as this is an all-island solution and have therefore proposed that firm access should be the criterion used. Clarity is required as to whether within these groups the wind generation will be reduced on a pro-rata basis or by dispatching down the least amount of MW that alleviates the constraint.

It has to be noted again that in the absence of information around firm access in Northern Ireland it is impossible to comment in an informed way on the categories as proposed. There is no indication as to the amount of MWs that would fall into each of the proposed categories, however it is likely that in the near future projects will either be 100% firm or 0% firm. There is a significant difference between the connection process in NI and RoI. The Gate process in RoI allows the possibility of capping the amount of generation connecting at a particular time or in a particular area (until the next Gate), however the process in Northern Ireland has no facility to do this and new projects can come out of planning at any time. This means that there could be a significant number of projects in the third category at any given time. It is also likely that one of the constraints groups will be in the west of Northern Ireland. We note the response in SEM-11-086 regarding the treatment of the north south tie-line as a constraint or curtailment, which it is suggested would depend on a number of factors in both jurisdictions at the time. However it concludes that if there was no constraint group with respect to this issue, the dispatch order would be in the manner so best to address the security issue on the system. It is not at all clear what this means. Again we would suggest it is fundamental to understand this issue particularly if a pro rata approach is applied to curtailment or to areas outside the proposed constraint groups.

Clarification is required as follows: when groups have been determined, will the three areas be constrained first, thus potentially reducing constraints in other areas and resulting in less constraints in other areas, with the three areas identified always being constrained?

The treatment of constraints outside the three proposed zones also needs to be clarified. Energia would be opposed to a different rule set applied to this category. Financeability will be helped by a common ruleset, provided that the effects can be modelled and quantified. A pro rata approach would be unfinanceable.

In summary therefore having reviewed the categories proposed we conclude they would not be optimal for the following reasons:

- The proposed solution does not value full firmness.
- It would seem the middle category of 33-66% would be rarely used given that many projects often move from 0% straight to 100%.
- The last category 0-33% is completely open-ended and the constraints are completely uncapped.
- It is not possible to understand what the proposed categories will mean for projects until full modelling is complete

In response to the concerns identified above, IWEA has suggested two key principles below that will deliver a better solution and Energia would support this:

1. Recognition of 100% firm access which so should be a category of its own. This respects the high-level decision that firm capacity should have priority over non-firm capacity.

2. The next categories should each be capped in some way to allow each be meaningful and transparently distinguish priorities.

Therefore IWEA proposed the following categories which meet the two key principles highlighted above and Energia would strongly support this suggested approach:

- i) **Projects that are 100% firm** – This respects the high-level decision that firm capacity should have priority over non-firm capacity. IWEA notes that there is a SONI consultation that will deal with the definition and application of firm access in Northern Ireland.
- ii) **A tranche of projects such that projects in this group will see no more than 3-5% constraints** – IWEA notes that in the absence of information relating to the amount of projects with firm access and the levels of constraint that are likely to be seen, it is not possible to put a figure on what size this category should be. It is essential that the constraints experienced by this group are capped at such a level that these projects are bankable. IWEA proposed that this group be determined using the date of connection application at each connection node. This will address the concerns within the industry that projects can have substantially different connection lead times and respects the high level decision that between firm capacities, date order should determine priority. Energia suggests that the TSOs would identify this category by carrying out modelling which in addition to firm access windfarms adds projects to each node up to the point at which that node is likely to experience 5% constraints. Where a number of projects connecting at the same time to a node would increase the constraint level above 5% at that node, projects should be prioritised by date order of connection. Those non firm projects would then be placed into a 5% constraint category, and all other non firm projects placed into a non firm grouping as iii) below. 5% category would not need to be a guarantee of that level of constraints, but would provide a reasonable expectation of that level, which lenders and investors could form a view on, as they currently do with constraint reports.
- iii) **All other projects** – It should be noted that there may be a requirement for additional categories in the future to provide an opportunity for good projects in a higher band of constraints to have quantifiable levels of constraint to enable them to get financed.

Energia notes that additional resources may be needed to implement additional categories; however this may be necessary to ensure that projects can have certainty regarding levels of constraint and that development can continue. By having open-ended groups with uncapped constraints, there is a significant risk that this could be unbankable, which would stifle development such that targets for renewable generation will not be reached.

## **Temporary connections**

It is proposed that temporary connections fall into the lowest category of unit for their entire installed capacity up to the MEC that they have applied for in a completed application for connection to the relevant body.

Energia does not agree that temporary connections should be included in the lowest category. It is Energia's view that firm access followed by a 5% constraint group should be used as the criterion for inclusion of temporary connections in the constraints groupings. Within a grouping however it is fair that a temporary connection should be constrained before other members of that grouping.

Energia's rationale for this is that the first temporary connections were issued for gate 2 projects. This approach enabled some gate 2 projects to get built ahead of permanent new grid infrastructure build. This wave of temporary gate 2 projects is expected to achieve firm connections in around 5 years time. Many Gate 3 connection projects, which are clearly later applicants, will be non firm (but permanent) at the time that the gate 2 temporary connection projects become firm, but these later gate 3 non firm projects would be constrained off after firm temporary connection projects. This is not equitable, and would also be likely to increase the constraint cost to the customer, as firm access projects have to be compensated for constraints, whilst non firm are not.

## **Projects outside the constraints groups and lists**

For those constraints not covered in the constraint groups and lists a least cost dispatch scenario is to be used, with the constraint being eased in a way that would minimise curtailment (whether generator has firm access or not). The constraint would be managed by dispatching down the least amount of MW that alleviates the constraint.

It is not clear from the consultation paper, clarification note SEM-11-086 or from IWEA and NIRIG discussions with Eirgrid and SONI how projects outside these list areas would have constraints applied to them. Energia would be extremely concerned if a pro rata basis was to be considered. As indicated above, Energia would advise that this would make projects outside the constraints list areas unbankable, as there is no information available from which to assess the level of constraints or their financial impact.

Energia reiterates the danger of adopting a different priority ranking within a constraint list area versus outside it. Where the tie break rules differ such that financial consequences of constraints differ on the basis of whether a project is located within a zone or outside it, there are potential grounds for discrimination claims, and there is a lack of flexibility to allow the TSOs to move generators in and out of zones as the network develops. Energia is of the view that a single set of tie break rules for constraints should apply within the zones and outside them. The impact may then differ due to the grouping of projects within a zone, but the same



ranking rules would apply if a project was in or out of the zone. In our view this is the most pragmatic way to proceed, with a single set of rules applying for all price taking wind generators, regardless of where they are located. There is significant concern about the lack of information on how exactly projects outside the constraints groups and lists will be treated. There is currently no indication of what level of constraint will be experienced.

We note the response in SEM-11-086 regarding the treatment of the north south tie-line as a constraint or curtailment, which it is suggested would depend on a number of factors in both jurisdictions at the time. However it concludes that if there was no constraint group with respect to this issue, the dispatch order would be in the manner so best to address the security issue on the system. It is not at all clear what this means. Again we would suggest it is fundamental to understand this issue particularly if a pro rata approach is applied to curtailment or to areas outside proposed constraint groups. In particular there needs to be a clearer understanding of how it will impact projects in Northern Ireland as highlighted previously.

## **Curtailment**

Energia strongly opposes pro rata treatment for price taking priority dispatch wind generation in curtailment situations. Energia is of the view that there is no available reasonably accurate projection of the levels of curtailment or its financial consequences for new generators, and, without this, pro rata treatment would be unbankable.

In addition from a consumer perspective it is clear that pro rata curtailment will be more expensive as firm wind generators that are curtailed will have access to the market schedule and will receive market price compensation. In contrast non firm wind generators only have access to the market schedule to the extent that they are dispatched in real time and therefore will receive no market compensation when curtailed. Curtailing non firm wind first and curtailing firm wind last minimises costs to the consumer whilst incentivising projects that can connect and achieve firm access most quickly to get built. Such projects will be bankable as there will be a buffer of non firm projects to take curtailment before them, and this will mitigate to some degree the potential uncapped exposure to curtailment which would arise from pro rata treatment.

Clearly if different financial consequences arise from constraint or curtailment events, the TSOs must be able to distinguish in real time between the root cause that requires a wind generator to be controlled down, as to whether that is a constraint event or a curtailment event. It has been confirmed that the TSOs are not able to distinguish between them in every case and therefore we strongly advise that differential treatment of constraints and curtailment should not be implemented.

## **Constraints and curtailment**

SEM-11-063 states that where there are both constraints and curtailment issues arising, the TSOs shall first dispatch to manage the constraint issue and then work to address the curtailment issue. Energia would agree that this should serve to minimise the dispatching down of wind relative to an approach whereby curtailment issues are first addressed.

Energia's view is that if different financial consequences arise from constraint or curtailment events, the TSO's must be able to distinguish in real time between the root cause that requires a wind generator to be controlled down, as to whether that is a constraint event or a curtailment event. As confirmed in SEM-11-086 the TSOs are not able to do this in every case, and if different financial consequences arise, the TSO's would need to have robust systems to be able to justify their assessment of the cause in every case.

It is not clear from the consultation paper, clarification note SEM-11-086 or from IWEA and NIRIG discussions with Eirgrid and SONI how projects outside constraint group areas would have constraints applied. Energia would be extremely concerned if a pro rata basis was to be considered. As indicated above, Energia would advise this would make projects outside the constraints list areas unbankable, as there is no information available on which to assess the level of constraints or their financial impact.

Energia recommends that the rules adopted for tie breaks for both constraints and curtailment should be applied in the order of non firm wind price takers, the proposed 5% constraint grouping and lastly the firm access plant.

## **Excess generation events**

The SEM Committee considers that it is appropriate to reflect the proposals regarding dispatch of price taking generation in the approach to their detailed implementation of their decision regarding the quantity of price taking generators that is charged PFLOOR in an EGE.

Clarification is required on what exactly is proposed for an excess generation event. SEM-11-063 is unclear about this. SEM-11-063 seems to imply that pro rata curtailment would apply in an EGE but that would mean firm access generators effectively being penalised by a negative PFLOOR whilst non-firm generators, dispatched down and not in the ex post market schedule, being protected from negative PFLOOR. This would be a perverse outcome to penalise firm access generators who have been able to connect to the network on a firm access basis, whilst not penalising a non firm access generator who has connected before the deep works have been completed. Energia is aware that PFLOOR is consulted upon annually, but does not agree that negative PFLOOR creates a meaningful investment signal to stimulate demand side activity. Demand side investment would be better

stimulated through ancillary services contracts, rather than an unpredictable, uncertain and volatile revenue stream.

## **4. Conclusion**

The detail of how tie breaks are handled in practice has significant financial consequences for the generators in question and has important implications for achieving renewable targets and doing so in an efficient and cost effective manner. In this context the Managing Director of Energia Renewables, Peter Baillie, wrote to the Regulatory Authorities (RAs) on 26 September 2011 (see copy in appendix 1) to raise serious concerns about the significant lack of fundamentally important information that was not provided in SEM-11-063. Energia acknowledges the clarification note SEM-11-086 since published by the RAs on Wednesday 12 October 2011 and the extended deadline of Friday 14 October in which to respond. This shows recognition that more information was needed in order to provide a meaningful and considered response to SEM-11-063. However clarification note SEM-11-086 still leaves many important questions unanswered and indeed provides some information that only raises further questions and adds to our concerns in respect of the proposed pro rata treatment of curtailment, definition of constraint groups, and the proposed differential treatment of constraints and curtailment. In NI in particular no definition of Firm Access or FAQs exist, and significant questions remain on how the north south tie-line would be treated. Others including IWEA have also raised numerous information requests to Eirgrid and SONI. In the absence of this information there is no way to quantify the impact of the proposed decisions, and there is a very significant danger of unintended consequences arising from decisions made in the absence of critical definitions and basic information.

It is critically important to ensure that decisions made now which are primarily designed to address expected future issues do not render viable current projects unbankable. Lenders and investors can take a view on financial impacts where the effect can be quantified and where the impact can be capped or estimated by experts. Where impacts are unquantified and uncapped projects will be unbankable. And if current projects cannot be banked this will undermine future projects from a financing perspective.

In summary Energia's key points are:

- 1) Constraints and curtailment should be treated on the same basis. This should be in the priority of constraint of non-firm, 5% constraint grouping, and finally firm access.
- 2) We oppose pro rata treatment of curtailment on grounds that it is not financeable, would needlessly increase the cost to the consumer, would introduce unnecessary complexity (especially when constraints cannot be reliably distinguished from curtailment events), and would be a diversion of resource and focus.
- 3) Different tie break rules for three constraint groups versus renewable generators outside those groups is likely to be very problematic. The proposed treatment outside the groups is not clear, and the definition of the constraint groups themselves is also not known. The potential for unintended consequences is very high.

- 4) The proposed treatment of an excess generation event is not clear and needs to be clarified. The perverse outcome that firm wind generators are exposed to negative PFLOOR needs to be addressed.

Given the critical importance and complexity of the issues discussed in this response, Energia would like to request a meeting with the RAs to discuss in more detail.

## Appendix 1

Tanya Wishart  
Director of Electricity  
Utility Regulator  
Queens House  
14 Queen Street  
Belfast  
BT1 6ED

26 September 2011

### **Re: Tie Break consultation**

Dear Tanya,

At our meeting with you on Monday 19 September I raised serious concerns as to the lack of critical information needed to properly assess the proposed Tie Break consultation in order to make a reasoned response. I also raised similar concerns with Paul Bandon and Aoife Crowe of CER on a telephone call last week. You suggested I write to you to formally raise the information issues so that you could seek a response from Eirgrid and/or SONI. Accordingly I would be grateful if you would raise the following issues and undertake to procure the necessary information. There is a real danger of unintended consequences if decisions are made in the absence of critically important information.

Information requirements to enable reasoned responses

### **NI Specific Issues**

1. The Tie Break proposal for allocation of constraints is based on Firm Access and Firm Access Quantities. Northern Ireland currently has no definition of Firm Access or Firm Access Quantities. I understand SONI intend to issue a consultation on this shortly, but to date nothing has been issued. As this is fundamental to the proposed treatment of constraints in N.I. I would request that the consultation response deadline be put back until this matter has been resolved.
2. There is no definition of the proposed constraints group in Northern Ireland. Since the proposed rules for dealing with constraints outside the specified constraints group area would be different it is essential to have a definition of the area that would be affected in the constraints group. A definition of this should be provided. Further there is no information provided on the potential level of constraints outside a designated constraints group, and the impact of different treatment could be very significant.
3. Given the potentially high level of constraints in Northern Ireland due to the quantum of wind scheduled to connect to the backbone network, in the



absence of the north south interconnector, would reducing generators output be treated as curtailment or a constraint?

4. SONI has never issued constraint reports, and there is no visibility to generators of the level of potential constraints and/or curtailment in N.I. SONI should provide information on the potential level of connections above which the backbone capacity would be likely to see significant curtailment or constraints, and advise their views on what the levels of constraints and curtailment could be.

### **All island Issues**

5. There is no definition of the constraint groups proposed for ROI. Please provide area definitions.
6. How could a “pro rata basis on the island of Ireland” for curtailment work in the absence of a north south interconnector where the NI system could be significantly overloaded itself?
7. NCC staff (Michael Kelly) indicated at a briefing on 6 July that it is not always possible to distinguish between constraints and curtailment in real time. The Tie Break paper states that SOs have confirmed that it is possible to distinguish them. I understand that there may be ‘a range of views’ within Eirgrid on this issue. Given the proposed differences in financial treatment of constraints and curtailment it would be essential that constraints and curtailment be clearly identified in real time, without exceptions. Can Eirgrid confirm categorically that constraints and curtailment be separately identified, and confirm that when operationalised it will make this information available to the market to avoid the potential for legal challenges on the financial treatment being controlled down.
8. How many windfarms and MWs fall into each of the proposed FAQ categories? There is no visibility of this, and without it is impossible to say whether these are appropriate categories or not.

I would be grateful if the above questions can be addressed, and would urge that the deadline on response to this consultation be deferred until the information is provided.

In addition I would make a couple of key points, which I will reiterate in our response to the consultation in due course.

- 1) Curtailment is unquantified and the proposed ‘pro rata’ treatment would leave it uncapped. This will make projects unbankable with immediate effect.

There is no reasonably accurate view of the likely build out of gate 3 and new N.I. windfarms. The SOs only have grid connection offer information, and this does not take into account project difficulties in obtaining planning, economic feasibility of windfarms, or financing difficulties. As a result the Facilitation of Renewables information on constraints and curtailment is out of date and is misleading. It does not take into account the c415MW of non controllable older windfarms, plus a further c85MW of sub 5MW gate 3 connections. Lenders will take a worst case view of curtailment over the 15 year debt term of a windfarm, based on the scenario information currently available. This will include assessing a "worst case" to 2020 and beyond to 2026, which would have to include a view of gate 4/follow on build. Such a view would certainly make projects unbankable now, and put an immediate stop to current gate 2 project financings, with a consequent knock on effect to future financings. Only developers such as ESB, BGE and SSE that are able to build windfarms using balance sheet finance, who do not use project finance, would be able to finance projects in this circumstance.

- 2) The lack of critical information to assess the proposed tie break rules needs to be addressed before reasoned responses can be provided. I

We request that the RAs extend the deadline on this consultation until after critical information has been provided. We need to avoid the potential for serious unintended consequences arising from decisions on these important issues.

Yours sincerely

Peter Baillie  
Managing Director, Energia Renewables