



**Energia response to I-SEM Energy Trading
Arrangements Detailed Design**

Building Blocks Consultation SEM-15-011

25 March 2015

Executive Summary

This response reflects our detailed consideration of the issues at hand in the Building Blocks consultation. We have made every effort to understand the proposals put forward, identifying potential issues and alternative solutions where applicable. It is difficult to be definitive at this stage without understanding the interaction with renewable support schemes under I-SEM, the detailed design of the balancing market, and the TSO approach to dispatch. Suggested alternative solutions put forward in this response should not therefore be considered as our final position on these matters. However we do see potential merit in them vis-à-vis some of the proposals put forward in the consultation paper and would welcome the opportunity to discuss further with the regulatory authorities (RAs).

We recognise that several implementation options might exist to achieve the same policy objective and are acutely aware that the appropriateness of any one option depends on how it functions within the wider context of the overarching trading arrangements. In particular, the implementation of policy decisions relating to the treatment of constraints, firm access, priority dispatch and curtailment will be affected by the detailed design of the balancing market. We therefore recommend that the RAs consult on implementation options for the policy areas covered in the Building Blocks consultation as part of the forthcoming Markets consultation. Furthermore, we see significant merit in the RAs holding industry workshops / further RLG meetings on these matters prior to any formal consultation.

It is clear from material covered in this consultation and the Markets RLG workshops that careful consideration should be given to assessing the TSO approach to dispatch under I-SEM, supported by qualitative and, where appropriate, quantitative modelling. The implementation of policy decisions directly linked to the physical dispatch of generation (such as treatment of constraints, firm access, priority dispatch and curtailment) will be materially affected by how the TSO dispatches the system. To illustrate this point we have provided some examples in this response. This issue is discussed in significantly more detail in our RLG feedback to the RAs submitted on 4th March 2015. We suggest this area should be prioritised given its fundamental importance to the detailed design and integrity of the I-SEM ETA.

In terms of other general but important points, we would refer the RAs to Energia's recent Markets RLG feedback and separate correspondence to the RAs from the Electricity Association of Ireland. We will not replicate this feedback here in the interests of brevity but we would appreciate if the RAs could review and respond to it.

Our views in relation to each of the specific Building Block topics are summarised below.

1. Treatment of Losses

- Locational loss factors should remain in I-SEM
- Energia does not support the proposed implementation of generator losses in I-SEM as set out in SEM-15-011 but rather recommends that loss factors are applied at the single notional 'point' of the trading boundary and that all loss translations required to achieve this outcome are carried out by the central market systems. Energia agrees with the SEM Committee's view that I-SEM interconnectors should be modelled separately in the market systems and their individual loss factors applied.
- With respect to outturn loss factor correction, we suggest a more appropriate alternative to global aggregation is to assign the error to the market operator and recover the cost through an annual tariff similar in principle to the current recovery of constraint costs.

2. Treatment of Constraints

- Energia welcomes the SEM Committee view that the treatment of constraints (and by association the policy on firm access) should remain the same in I-SEM as in the current SEM.
- However we have a concern, shared by IWEA, that the detail in the consultation paper does not actually fully retain the existing constraint policy.
- Our primary concern is uncertainty regarding the approach the TSO will take to dispatch under I-SEM which is illustrated by examples in section 3.1.1 of this response.
- Energia would also emphasise that the principle that a generator with firm access should not be prevented from accessing infra-marginal rent due to network constraints must equally apply to the I-SEM balancing market and not be limited to ex-ante timeframes, as seems to be proposed in the consultation paper.
- In this response we suggest how firm access could be facilitated in the balancing market.

3. Compensation for Constraints

- Energia supports the general principle for constraint compensation set out at the beginning of section 3.3. of the Building Blocks consultation paper but observe that there seems to be a potential inconsistency between the principle and the imbalance settlement algebra presented at RLG meeting 2.2. It is therefore important for the RAs to clarify their intent with regards to constraint compensation and ensure it is coherently applied throughout the detailed design.
- Furthermore, Energia would strongly emphasise that regardless of the principle underpinning compensation for constraints in I-SEM,

the rules around flagging and tagging are of fundamental importance to the balancing market due to their impact on price formation and therefore market price signals.

- We therefore strongly disagree with the stated view that the general principle for constraint compensation outlined in section 3.3 of the consultation paper “simplifies the need to identify the reason for each and every action in the balancing timeframe” (p.18).
- The consultation paper defines constraints only with reference to the transmission system. However, Energia would emphasise that receipt of compensation for constraints should be based upon the connection status of the unit regardless of its physical connection point.
- In this response we explore the mechanics of how constraint compensation could be delivered for generators with and without absolute priority dispatch and put forward some positive suggestions.
- We believe constraint compensation for generators with absolute priority dispatch to be contingent upon the appropriate treatment of absolute priority dispatch in the balancing market timeframe.

4. Firm Access

- Energia agrees with the SEM Committee’s Option (a) proposal that:
 1. Participation in ex-ante and balancing markets is not limited to the firm access quantity of a generator.
 2. Generators that trade volumes in ex-ante markets that exceed their firm access quantity have an exposure to the imbalance price if they are not dispatched above their firm access quantity to match their ex-ante contract volume.
- The alternative proposal (option b as presented in the consultation paper) where a generator bids its aggregate ex-ante trade prices in the balancing market for non-firm volumes does not seem an appropriate approach for reasons explained in this response.
- We further note that trading in ex-ante markets should not confer advantageous dispatch on units with non-firm access. Subject to the rules regarding absolute priority dispatch the TSO should take into account the cost associated with dispatching a generator above its firm access quantity. The criteria used to determine this decision under I-SEM needs further careful consideration.
- Energia agrees with the SEM Committee view that participants with non-firm access should, wherever possible, be provided with the opportunity to trade out their non-firm volumes in the intra-day timeframe.

- However, we believe that publication of any information facilitating such trading should be consistent with REMIT requirements.

5. Priority Dispatch

- We support continuation of absolute priority dispatch for wind.
- Under the Renewables Directive the TSO has an obligation to maximise the dispatch volumes of generators with absolute priority dispatch regardless of their ex-ante trading positions.
- Furthermore, implementing compensation arrangements for constraints for generators with absolute priority dispatch in I-SEM is contingent upon the appropriate treatment of absolute priority dispatch in the balancing market timeframe.
- To facilitate further consideration and debate on this topic we have set out in this response scenarios illustrating how absolute priority dispatch could possibly be implemented under the I-SEM trading arrangements and that would allow constraint compensation for generators with absolute priority dispatch to be given effect.
- Energia would support the development of energy market mechanisms in I-SEM that allow generators with absolute priority dispatch to avoid negative pricing.
- In the interests of facilitating further consideration and debate in this area we have set out in this response some suggestions regarding how the price sensitivity of generators with absolute priority dispatch could potentially be achieved. We see a number of potential advantages in this approach compared with the de-linked option suggested in the consultation paper labelled 'A Revised Approach'.
- The priority dispatch status for peat should be removed for reasons stated in this response.

6. Curtailment

- Curtailment will be extremely difficult to forecast under I-SEM because it is caused by dynamically changing conditions on the transmission system which themselves will be effected by the trading behaviours of participants in a continuously traded market. If wind generators therefore choose to not trade in ex-ante markets to avoid the risk of facing unquantifiable imbalance exposures because of the lack of compensation for curtailment, this will distort DAM price signals and undermine the efficiency of market coupling, which in turn could reduce the efficiency of interconnector exports further exacerbating the curtailment problem.
- We therefore strongly advocate a re-assessment of the current policy decision on compensation for curtailment due to the

significant change in the risks faced by wind generators under the I-SEM market design.

- We also support IWEA's position on this matter. As IWEA have stated in their response, the process to reach the curtailment decision took place in the entirely different context of the SEM. The manner in which that decision has been transposed into an entirely new legal framework and market design without any re-evaluation or review is fundamentally flawed in terms of due process. It is flawed, as IWEA explain, because the decision was made both in advance of the SEM Committee's own decision on the High Level Design, and also in advance of the overarching regulations for the Electricity Balancing market being agreed in the Comitology process.

7. Treatment of Currency

- Energia supports the proposal to project currency costs ex-ante and charge to suppliers as a tariff with correction factors in subsequent periods. However it is unclear how this will be implemented in practice given the potential for multiple Market Operators settling different markets.
- Consideration also needs to be given to the treatment of currency in capacity, ancillary services and forwards markets.

8. De-minimis Level

- There have been no substantive arguments presented in the consultation paper (or put forward by others through the RLG forum) that would justify a review of the existing de-minimis level or de minimis arrangements as a result of the introduction of I-SEM.
- Retaining the existing policy with respect to de-minimis is both appropriate and necessary from a market access and financing perspective.
- The current treatment of de-minimis should also continue in I-SEM as it reflects the physical reality of meeting local demand from embedded generation which is clearly beneficial.
- Continuation of the current policy is also important from a legacy perspective as contracts will have been struck between suppliers and generators on the basis of existing arrangements and financing will be contingent upon this and the legitimate expectations of current policy enduring for the life of such investments.

9. Market information

- Energia strongly supports the principle of transparency in relation to release of market information. This policy has worked well in the SEM and it is even more important under I-SEM given the potentially significant issues the I-SEM design presents for implementing an

effective market power mitigation strategy. Whilst market transparency is an essential component of the market power mitigation strategy for I-SEM, it is not, on its own, sufficient. For example, it does not address the fundamental problem of information asymmetry under the market design and therefore the benefits the design confers upon portfolio players. Further consultation by the RAs regarding the scope of the market power mitigation workstream is needed to ensure its remit is sufficient to deliver an appropriate suite of market power mitigation measures that work holistically across the I-SEM energy, capacity and ancillary services markets.

- The consultation paper provides little clarity regarding the level of transparency achievable in European ex-ante market timeframes. Given the importance of transparency to market power mitigation in I-SEM it is fundamentally important that the regulators communicate any potential restrictions on data release to participants to facilitate informed debate on their impact on effective market power mitigation. This should be done prior to commencement of the market power mitigation workstream.
- Energia would support similar levels of transparency in the I-SEM balance market as the current SEM. We would also support release of additional market information that will assist participants manage their balancing risks more effectively such as information on system margin, changes in system demand forecasts, changes in system wind forecasts, etc.
- To minimise the operational overhead on participants, and to remove any potential barriers this creates to new entry, Energia would recommend that, where possible, reporting requirements under European regulations (e.g. REMIT etc.) are met centrally and that all such reporting requirements are taken into account in the design of the central market systems, including, if relevant, the auction platform for interconnector products. To facilitate this objective Energia would welcome further discussion on the matter.

1. Introduction

Energia welcomes this opportunity to respond to the SEM Committee consultation (SEM-15-011) on the Building Blocks component of the energy trading arrangements (ETA) and how the high level policy decisions can be accommodated in I-SEM. Energia has considerable experience across all sectors of the electricity industry and has already provided initial views in this area through the RLG forum.

This response reflects our detailed consideration of the issues at hand. We have made every effort to understand the proposals put forward, identifying potential issues and alternative solutions where applicable. However it is difficult to be definitive at this stage without understanding the interaction with renewable support schemes under I-SEM, the detailed design of the balancing market and the TSO approach to dispatch. Suggested alternative solutions put forward in this response should not therefore be considered our final position on these matters, we reserve our right to change opinions and views as more information becomes available regarding the detailed design of the I-SEM. However we do see potential merit in them vis-à-vis some of the proposals put forward in the consultation paper and would welcome the opportunity to discuss further with the regulatory authorities (RAs).

Energia does understand the difficulty faced by the RAs in deciding the optimal order for consulting on various elements of the new market. The splitting of the ETA phase into two distinct parts, namely 'Building Blocks' and 'Markets', has however caused significant difficulties for stakeholders when considering the implementation of high level policy decisions in the new market. We made this point in our RLG Building Blocks feedback and positively acknowledge steps taken by the regulatory authorities (RAs) to take this into account. However we remain concerned that many of the Building Block concepts currently open for consultation are fundamentally related to other components of the detailed design yet to be determined. In particular policy decisions relating to the treatment of constraints, firm access, priority dispatch and curtailment, the implementation of which (and therefore how the policies will work in practice), will be affected by the detailed design of the Balancing market. The Project Plan for I-SEM needs to recognise this interconnection and be cognisant of the fact that stakeholders cannot consider policy decisions in isolation from the market design. We therefore suggest that the two areas are brought together by re-visiting relevant policy areas from the Building Blocks consultation in the context of the forthcoming Markets consultation and deferring any final decision making to align with decisions on ETA design.

It is clear from material covered in this consultation and the Markets RLG workshops, and in the interests of facilitating informed debate and evidenced based decision making, that careful consideration should be given to assessing the TSO approach to dispatch under I-SEM, supporting by qualitative and, where appropriate, quantitative modelling. The rationale for this was discussed at length in our RLG feedback to the RAs on 4th March 2015. We suggest this should be prioritised given its fundamental importance to the detailed design and integrity of the I-SEM ETA. Energia would strongly emphasise that the implementation of policy decisions directly linked to the physical dispatch of generation (such as treatment of constraints, firm access, priority dispatch, curtailment, etc.) will be materially affected by how the TSO actually, in practice, dispatches the system. To illustrate this point we have provided some examples in this response.

In terms of other general but important points, we would refer the RAs to Energia's recent Markets RLG feedback and separate correspondence to the RAs from the Electricity Association of Ireland. We will not replicate this feedback here in the interests of brevity but we would appreciate if the RAs could review and respond to it.

The remainder of this response will focus on the substantive issues raised in the Building Blocks consultation under the various topics. We have made some suggestions on implementation approaches but again would emphasise that these are not definitive views but rather reflect our ongoing positive engagement in the detailed design process by defining issues more definitively to facilitate debate. In light of the open door policy of the regulator, which we strongly support, Energia would welcome a bilateral meeting with the RAs to discuss our views on these matters.

2. Treatment of Losses

Energia welcomes the initial view from the SEM Committee that the implementation of I-SEM does not necessitate a change in the treatment of transmission system losses. The treatment of losses has been extensively debated and reviewed in recent years and a final policy decision in this area (SEM-12-049) has been made following several protracted rounds of consultation and proposed decisions.

As outlined in our response to SEM-12-024, the arguments that have been forwarded in opposition to the current TLA approach in the SEM are considered to be lacking principled objections and in many cases are substantially flawed. These same arguments (listed and critically evaluated in our response to SEM-12-024) were rehearsed by some participants at RLG meeting 1.1 and subsequent written feedback to the RAs and will no doubt be re-iterated in responses to this consultation. It is our view that there is no

justifiable argument supporting a change to the transmission losses policy triggered by I-SEM.

Furthermore Energia would emphasise that the primary and secondary assessment criteria used by the SEM Committee, when assessing the HLD, includes environmental and efficiency criteria. To meet these assessment criteria market signals which reflect the loss of energy in the transmission system due to the location of generation assets needs to be maintained in I-SEM.

We therefore re-state our view that re-opening this policy decision now would be an unhelpful and contentious distraction when the debate should focus on the efficient and pragmatic implementation of locational transmission and distribution loss factors in I-SEM to incentivise appropriately located and efficient investment.

2.1 Generator Losses

The most appropriate approach for implementing the locational loss factor policy for the I-SEM would be for all trading to occur at the same notional 'point' on the system. This is best achieved in relation to I-SEM by making the trading boundary the notional reference 'point' for all trading activities, including trading in the balancing market. Furthermore, to avoid unnecessary and unhelpful operational complexity for participants, physical notification should also be directly aligned with the point of trading – i.e. be submitted to the TSO at the trading boundary.

If, under I-SEM, different markets trade at different notional locations it introduces significant and unnecessary complexity into market operations, particularly when required to trade in different markets (that under the proposal would trade at different system 'locations') simultaneously. This is an unhelpful operational complexity for existing participants and the operational risks it creates (and therefore potential commercial risks) could act as a barrier to new entry, particularly for smaller participants. To further simplify trading arrangements, Energia would recommend that all loss translations (from station gate to trading boundary and vice versa) required to facilitate energy trading in I-SEM to occur at the trading boundary should be carried out by the central market systems. We believe this is the common sense approach and will significantly reduce operational (and therefore potential commercial risk) for existing participants while removing any potential barrier that the proposed approach may cause for new entrants.

Therefore, for the reasons explained above, Energia does not support the proposed implementation of generator losses in I-SEM as set out in SEM-15-011 and rather recommends that loss factors are applied at the single notional 'point' of the trading boundary and that all loss translations required to achieve this outcome are carried out by the central market systems.

2.2 Interconnector Losses

Energia agrees with the SEM Committee's view that I-SEM interconnectors should be modelled separately in the market systems and their individual loss factors applied. As a general principle, modelling of I-SEM interconnection should be as accurate as possible to avoid any potential distortion of market coupling. Inaccurate modelling of interconnection that distorts market coupling outcomes would be inconsistent with the stated objectives of the I-SEM HLD, to ensure efficient cross border trade.

The potential issues associated with implementing accurate modelling of losses on I-SEM interconnectors highlights the importance of an informed debate on the governance arrangements for I-SEM day-ahead and intra-day markets, in particular the relationship between membership arrangements, issue management, change request procedures, voting rights and allocation of development costs for European coupling systems. This is of fundamental importance for I-SEM given the exclusive nature of the energy trading arrangements and the complete reliance on European coupling systems in the day-ahead and intra-day timeframes.

2.3 Outturn Loss Factor Correction

We welcome future consideration of this issue in the forthcoming Markets consultation paper and thought it would be helpful to provide the following views so they can be taken into consideration in the formulation of that consultation.

The market error caused by Global Aggregation is largely a result of assumptions necessary to allow the market trading arrangements and settlement functions to work – e.g. transmission and distribution loss factors, half-hourly profiling of meter data, etc. The mechanism used to deal with this error should therefore be designed to provide appropriate incentives on the institution responsible for those assumptions to minimise the associated error. As the institutions responsible for making these assumptions are regulated services – e.g. network operators, meter data providers, etc. – the primary incentive that can be placed upon them is transparency around, and accountability for, the cost of the error to the consumer. To the extent this cost is passed onto suppliers as an ex-post charge it is effectively concealed from consumers and therefore undermines this incentive. Over the longer term weakening incentives on such institutions will lead to increases in the error and therefore inefficiency in the market arrangements.

Furthermore, to the extent the ex-post cost passed onto suppliers cannot be accurately forecasted or predicted it becomes a commercial risk that cannot be adequately managed or recovered. In other words you penalise suppliers for an error mostly generated by centralised market assumptions that they

have no control over, while not incentivising those who are in a position to actually influence the size of the error to minimise it.

The issues described above are present in the current approach to managing the NDLF error in the SEM and remain under both options presented at RLG meeting 2.3. Alternative solutions should therefore be considered and progressed. One option we would suggest is to assign the error to the market operator and recover the cost through an annual tariff similar in principle to the current recovery of constraint costs.

3. I-SEM policy decisions relevant to Balancing Market

Energia observes that policy decisions relating to treatment of constraints, firm access, priority dispatch and curtailment apply primarily to the balancing market. The implementation of these policy decisions in the I-SEM balancing market determines the risk associated with participation in ex-ante timeframes and therefore the incentives placed upon participants when trading in those timeframes. The focus for policy implementation should therefore primarily be in relation to the I-SEM balancing market

3.1 Treatment of Constraints

Energia welcomes the SEM Committee view that the treatment of constraints should remain the same in I-SEM as in the current SEM. However we have a concern, shared by IWEA, that the detail in the consultation paper does not actually fully retain the existing constraint policy. A generator with firm access should not be prevented from accessing infra-marginal rent due to a network constraint. Energia would stress that this principle must apply equally to the I-SEM balancing market and not be limited to ex-ante timeframes as seems to be proposed, IWEA has similar views.

3.1.1 TSO approach to dispatch and its impact on constraint policy

The current constraint mechanism in SEM underpins the constraint policy guaranteeing compensation for constrained generators with firm access and ensuring that SEM energy schedules and prices are unconstrained. Participants are therefore held commercially neutral to TSO dispatch decisions. Whilst Energia welcomes the SEM Committee view that the treatment of constraints (and by association the policy on firm access) should remain the same under I-SEM, we are concerned, after participating in discussions at the RLG meetings, that there seems to be the potential for significant divergence from this objective.

Our primary concern is uncertainty regarding the approach the TSO will take to dispatch under the I-SEM trading arrangements. Energia would strongly emphasise that the implementation of policy decisions directly linked to the physical dispatch of generation (such as treatment of constraints, firm access,

priority dispatch, curtailment, etc.) will be materially affected by how the TSO actually dispatches the system in practice. To illustrate this point we have provided some examples that relate to the implementation of constraints and firm access policies below:

1. If generators are unable to trade in the intra-day market due to a non-energy balancing action taken prior to intra-day gate closure by the TSO then trade dynamics in the intra-day market will not be 'unconstrained' and could be materially affected by TSO dispatch decisions. This would seem a significant change to the current firm access and constraint policy in the SEM.
2. If the TSO do not accept energy balancing bids from units that are constrained off in the balancing timeframe the balancing market price will not be 'unconstrained' and a generator would effectively be excluded from participation in the balancing market due to a network constraint. Again, this would seem a significant change to the current firm access and constraints policy in the SEM.
3. In relation to firm access, it is the criteria used by the TSO under the I-SEM design to decide whether or not a plant with non-firm access is dispatched above its firm access quantity that will, in practice, determine what firm and non-firm access actually means under the I-SEM design.

As evidenced by the examples provided above Energia would stress that the TSO approach to dispatch under the I-SEM design needs careful consideration, both in terms of the implementation of policy decisions, as well as the detailed design of the energy trading arrangements (in both cases to ensure that what is intended is actually implemented). We would therefore refer the RAs to our RLG feedback submitted on 4th March 2015 where we discuss these issues in significantly more detail.

3.1.2 Mechanics of constraint compensation for generators without absolute priority dispatch

The SEM is an unconstrained market. The I-SEM HLD has not signalled any changes to this policy and therefore a generator with firm access should not be prevented from accessing infra-marginal rent due to network constraints. The paragraph below tries to understand how this objective could potentially be delivered under I-SEM.¹

If a generator participates in the ex-ante markets it will presumably, under the market rules, have a right to generate a volume of electricity that is equivalent

¹ Energia would welcome the opportunity to discuss this understanding with the RAs and review further as more information becomes available regarding the detailed design of the I-SEM.

to its ex-ante contract position, which will have been notified to the TSO in the form of a physical notification. To dispatch a generator away from its physical notification (either for energy balancing or constraint management purposes) the TSO will presumably need to accept a bid or offer from the generator through the balancing market. Upon acceptance of the balancing market bid or offer, we assume the contract position of the generator will then be adjusted to reflect the balancing market trade so that the energy imbalance of the generator at intra-day gate closure is maintained. The generator could then be settled for its balancing market trade and imbalance position keeping it whole against its ex-ante contract position if constrained up / down due to the offer / bid acceptance by the TSO in the balancing market (so it either gets paid its offer price or pays back its bid price similar to the current SEM). Note the resulting change to its dispatch quantity and contract positions would result in the generator maintaining a balanced position against its ex-ante contract position.

Energia would emphasise that the principle that a generator with firm access should not be prevented from accessing infra-marginal rent due to network constraints must equally apply to the I-SEM balancing market and not be limited to ex-ante timeframes, as seems to be proposed. To facilitate firm access in the balancing market timeframe the TSO could be mandated to accept offers / bids from constrained plant for energy balancing purposes and accept corresponding bids / offers from the same plant for the purposes of constraint management.² This minimises the impact on the energy balancing price by the non-energy actions taken by the TSO (i.e. that the balancing price is unconstrained subject to the interaction between balancing market trades and day-ahead and intra-day trading behaviours as set out in the HLD decision³) and ensures generators are not excluded from accessing infra-marginal rent in the balancing market due to constraints.⁴ Implementing the treatment of constraints in I-SEM in this way aligns more with the treatment of constraints in the current SEM design where generators can access infra-marginal rent regardless of constraints via the ex-post pool (which is the unconstrained energy balancing market for the SEM) and non-energy actions are pay as bid through the constraint payment mechanism.

² We are happy to discuss these suggestions with the RAs and we may wish to review further when more information becomes available regarding the detailed design of the I-SEM.

³ See decision “x. Marginal pricing for unconstrained energy balancing actions” on p.7 of HLD and clarified by paragraph 4.5.17 on flagging and tagging on p.16

⁴ Energia would note however that given the potential interaction of balancing market trades conducted prior to intra-day market gate closure with intra-day market trading activities and the subsequent effect such trades have on PNs (which are the starting point of dispatch), the potential for distortion of price formation by TSO system actions in the balancing market in particular, and across ex-ante energy markets more generally, will remain high, particularly if early balancing market actions by the TSO is significant.

Energia would strongly emphasise that if the treatment of constraints in I-SEM does not facilitate access to infra-marginal rent for constrained generators in the balancing market timeframe then this would undermine the concept of firm access in the I-SEM. A similar argument could be made in relation to the day-ahead market if generators used by the TSO for non-energy balancing actions prior to intra-day gate closure are thereby prevented from accessing infra-marginal rent in the intra-day market. We therefore re-state our view that the TSO approach to dispatch under the I-SEM trading arrangements needs further careful consideration.

3.1.3 Mechanics of constraint for generators with absolute priority dispatch

In relation to generators with absolute priority dispatch Energia notes that the market mechanism for delivering compensation for constraints could be the same as set out in section 3.1.2 above. Implementing compensation arrangements for constraints for generators with absolute priority dispatch in I-SEM however is contingent upon the appropriate treatment of absolute priority dispatch in the balancing market timeframe. We discuss this further in section 3.3 below where we described a possible mechanism that would allow constraint compensation for generators with absolute priority dispatch to be calculated with reference to their real-time availability.⁶

3.1.4 Compensation for Constraints

Energia supports the general principle for constraint compensation set out at the beginning of section 3.3. of the Building Blocks consultation paper but observe that there seems to be a potential inconsistency between the principle and the imbalance settlement algebra presented at RLG meeting 2.2. Under the imbalance settlement algebra a generator is only paid the potential premium or discount on offer / bids taken by the TSO for non-energy actions on dispatch volumes relative to their Final Physical Notification (FPN). Therefore if the FPN submitted by a generator is not equal to its ex-ante contract position it would seem that the stated constraint compensation principle will not hold. It is therefore important for the RAs to clarify their intent with regards to constraint compensation and ensure it is coherently applied throughout the detailed design.

Furthermore, Energia would strongly emphasise that regardless of the principle underpinning compensation for constraints in I-SEM, the rules around flagging and tagging are of fundamental importance to the balancing market due to their impact on price formation and therefore market price

⁶ As previously stated, we are happy to discuss these suggestions with the RAs and we may wish to review further when more information becomes available regarding the detailed design of the I-SEM.

signals. We therefore strongly disagree with the regulators stated view that the principle outlined at the beginning of section 3.3 regarding constraint compensation “simplifies the need to identify the reason for each and every action in the balancing timeframe” p.18.

3.1.5 Constraint compensation for generators without absolute priority dispatch

Compensation for constraints for generators without absolute priority dispatch could potentially be handled in a similar manner to the current SEM as described in section 3.1.2 above – i.e. a generator is either paid its balancing market incremental price or pays back its balancing market decremental price depending on whether it is constrained up or down by the TSO.

3.1.6 Constraint compensation for generators with absolute priority dispatch

Subject to the implementation of priority dispatch in the balancing market (see section 3.3 below) compensation for constraints for generators with absolute priority dispatch could potentially be handled in a similar manner to the current SEM as described in section 3.1.2 above (subject to a change to the decremental price used for the unit). An eligible generator could register for absolute priority dispatch status under the I-SEM trading arrangements and thereby submit a decremental price into the balancing market that facilitated recovery of the lost opportunity associated with its renewable support mechanism.

3.1.7 Constraint compensation for distribution connected generators

Section 3.1 of the consultation paper defines constraints only with reference to the transmission system. However, Energia would emphasise that receipt of compensation for constraints should be based upon the connection status of the unit regardless of its physical connection point. Therefore distribution connected generators with firm access should receive the same compensation for constraints as transmission connected generators with firm access.

3.2 Treatment of Firm Access

Energia strongly supports the principle of firm financial access rights for transmission and distribution connected generators and therefore believe the firm access policy in I-SEM should ensure that generators are fully compensated for constraints up to their firm access quantity. We note, however, that the recent ‘minded to’ policy decision with respect to ‘Outturn Availability’ ignores this principle and exposes participants with firm access to commercial risk during network outages. This significantly undermines the firm access policy in the SEM, weakens incentives on network asset owners /

operators to complete work in an efficient and timely manner and will ultimately lead to increasing market inefficiencies over time.

We furthermore note that the firm access policy in the I-SEM must ensure that access to market above the firm access quantity of a generator is on a non-firm basis only. Generators with non-firm access should therefore only be dispatched by the TSO above their firm access quantity if the transmission system can accommodate their output. How in practice the decision to dispatch a generator above its firm access quantity is taken is contingent upon the criteria used by the TSO when dispatching the system and, as previously articulated in section 3.1.1, the TSO approach to dispatch under I-SEM requires further careful consideration.

In the context of I-SEM, if generators with non-firm access have traded in ex-ante timeframes above their firm access quantity but do not receive a corresponding dispatch quantity they should be liable under the market rules for any resulting exposure to the imbalance price⁸. This maintains a clear distinction between firm and non-firm access rights and ensures that there are appropriate incentives on participants with non-firm access when trading in ex-ante timeframes. Energia therefore agrees with the SEM Committee's Option (a) proposal that:

1. Participation in ex-ante and balancing markets is not limited to the firm access quantity of a generator.
2. Generators that trade volumes in ex-ante markets that exceed their firm access quantity have an exposure to the imbalance price if they are not dispatched above their firm access quantity to match their ex-ante contract volume.

The alternative proposal (option b as presented in the consultation paper) where a generator bids its aggregate ex-ante trade prices in the balancing market for non-firm volumes does not seem an appropriate approach to dealing with non-firm access for the following reasons:

1. It treats non-firm volumes as having a form of firm access effectively providing constraint compensation (held financially neutral) for non-firm volumes. This is contrary to the firm access and constraints policy and undermines the value of firm access.
2. It may be operationally difficult to implement for thermal units if commodity prices change between the different market timeframes. For example, a conventional generators incremental price in theory could out-turn lower

⁸ Note we are assuming that in this scenario a generator with non-firm access will submit a FPN equal to its contract position and that if it receives a dispatch quantity that is greater than or equal to its firm access quantity this is not associated with the acceptance of a balancing market bid by the TSO – i.e. the TSO will simply set the dispatch quantity of the generator at the output level that can be accommodated by the network.

than its decremental price or its decremental price for its non-firm output could be less than its decremental price for its firm output.

3. It is likely to be difficult to monitor to ensure the correct value for ex-ante trade positions are bid into the balancing market by the unit - e.g. the generator may have entered into several ex-ante market trades.
4. It is likely to distort ex-ante market schedules and prices because it undermines the incentive created by the risk of imbalance exposure that should be associated with trading on the basis of non-firm access in ex-ante timeframes.
5. It is likely to distort balancing market schedules and prices as under the proposal non-firm participants with ex-ante trade positions would submit prices to the balancing market that do not reflect contemporaneous commodity pricing.

3.2.1 Influence of non-firm ex-ante trade positions on TSO dispatch decisions

Careful consideration is required in relation to how the TSO decides whether or not to dispatch a unit above its firm access quantity within the context of the I-SEM design. In particular trading in ex-ante markets should not confer advantageous dispatch on units with non-firm access.

Subject to the rules regarding absolute priority dispatch the TSO should take into account the cost associated with dispatching a generator above its firm access quantity. The criteria used to determine this decision under I-SEM trading arrangements needs further careful consideration during the detailed design.

As previously stated our concerns regarding how the TSO will approach dispatch under the I-SEM design are discussed at length in sections 5.1, 5.2, 5.3, and 5.5 of our written feedback to the Markets RLG workshops submitted to the RAs on 4 March 2015. It is also discussed in our feedback to EirGrid modelling proposals submitted on 10 March 2015.

3.2.2 Timely access to indicative dispatch information

Energia agrees with the SEM Committee view that participants with non-firm access should, wherever possible, be provided with the opportunity to trade out their non-firm volumes in the intra-day timeframe. However, we believe that publication of any information facilitating such trading should be consistent with REMIT requirements and be on a market wide basis – i.e. not just provided to affected participants. Also, care should be taken to ensure that participants are treated equally with regards to the release of such information – i.e. that some generators are not provided with more information than other generators due to the nature of the binding constraint in their area or their location. This could risk the introduction of differing degrees of non-firm access under the market design.

3.2.3 Firm Access for distribution connected generation

Energia would again emphasise that generators that participate in the I-SEM market (i.e. that are not de-minimus), that are connected to the distribution system, and that have firm access should continue to receive compensation for constraints. For our views on compensation for curtailment see section 3.4 below.

3.3 Treatment of Priority Dispatch

We support continuation of absolute priority dispatch for wind. Under the Renewables Directive the TSO has an obligation to maximise the dispatch volumes of generators with absolute priority dispatch regardless of their ex-ante trading positions. To facilitate further consideration and debate on this topic we have set out in the scenarios below some suggestions regarding how absolute priority dispatch could possibly be implemented under I-SEM trading arrangements. As previously stated, Energia reserves the right to change its opinions and views on suggested implementation mechanisms as more information becomes available regarding the detailed design of the I-SEM.

3.3.1 Potential implementation option for absolute priority dispatch under I-SEM

Scenario 1 - Wind generator trades less than its expected output:

A wind generator with absolute priority dispatch that trades 50% of its expected output in ex-ante markets could submit (or alternatively be allocated in settlement) a FPN equivalent to its ex-ante trade position which could then presumably form the starting point for the dispatch of the unit. However, if the unit was available in the balancing timeframe to deliver more than its ex-ante traded position (the remaining 50% of its expected availability) the TSO could be mandated to accept an incremental offer from the wind generator (which could potentially be allocated to the unit post-event through settlement) to move it from its FPN level up to the level of its available output. As it would not make sense for this balancing action to be price setting its price could be set post-event equal to the maximum of the imbalance price or zero for settlement purposes. The acceptance of the offer would therefore be a direct result of the absolute priority dispatch status of the unit rather than a submitted incremental price.

Assuming that the TSO was always obliged to increase the output of the wind generator to its real time availability if its real time availability was greater than its ex-ante contract position, then under this approach a wind generator would effectively receive a dispatch quantity equal to its real-time availability, subject to any subsequent balancing market bid acceptances by the TSO. Assuming the initial offer acceptance by the TSO is paid at the maximum of the imbalance price or zero and any subsequent bid acceptances are charged at

the decremental prices submitted by the generator (which as set out in section 3.1.6 above could be set to recover the value of its lost opportunity under its renewable support mechanism) this would then ensure the wind generator receives its ex-ante contract price for its ex-ante contracted volumes and the imbalance price (if greater than zero) for the remainder of their available output. Furthermore, it would also ensure that the wind generator is properly compensated for constraints under the I-SEM energy trading arrangements.

Scenario 2 - Wind generator trades more than its real time availability:

In the case of a wind generator that oversells through ex-ante markets (e.g. its ex-ante contract position is greater than its real-time available output) its FPN could be set equal to its real-time availability ex-post for settlement purposes. This would effectively mean that its starting position for dispatch (its dispatch quantity assuming there were no other actions taken by the TSO) was equal to its real-time availability, resulting in an imbalance for the generator against its ex-ante contract position. If the TSO then needed to reduce the output of the wind generator due to a constraint it would need to accept a bid to reduce the output of the wind generator via the balancing market. Again, assuming the balancing market bid was priced to recover the value of its lost opportunity under its renewable support mechanism this would then ensure that the wind generator was properly compensated for constraints under the I-SEM trading arrangements.

Scenario 3 - Wind generator does not trade in ex-ante markets:

If a wind generator does not trade in ex-ante markets then, similar to scenario 1, the TSO could be mandated to accept an offer in the balancing market (which could potentially be allocated to the unit post-event through settlement) equal to the level of its real-time available output. Again, similar to scenario 1, this offer could be priced ex-post at the maximum of the imbalance price or zero. If the TSO then needed to reduce the output of the generator for constraint purposes they would need to accept a bid from the generator via the balancing market. This approach would again ensure that the wind generator was paid the imbalance price (assuming it was greater than zero) for its available output and (assuming its balancing market bid was priced to recover the value of its lost opportunity under its renewable support scheme) would also ensure that the wind generator was properly compensated for constraints under I-SEM.

3.3.2 Price sensitivity of generators with absolute priority dispatch

Energia would support the development of energy market mechanisms in I-SEM that allowed generators with absolute priority dispatch to avoid negative pricing. We believe this is achievable in the day-ahead market through EUPHEMIA bid formats that allow generators to submit a floor price that they will not sell below. We also believe it can be achieved in the intra-day market

simply due to the fact that generators can choose whether or not they wish to sell output during the intra-day timeframe. Implementation in the balancing timeframe, however, is more complex and needs to be cognisant of renewable support mechanisms etc.

In the interests of facilitating further consideration and debate on this topic we have set out below some suggestions regarding how the price sensitivity of generators with absolute priority dispatch could potentially be achieved in the balancing market given the approaches to absolute priority dispatch and compensation for constraints already discussed. As previously stated, Energia reserves the right to change its opinions and views on suggested implementation mechanisms as more information becomes available regarding the detailed design of the I-SEM.

Assuming implementation of absolute priority dispatch and compensation for constraints as set out in section 3.3.1 above, generators with absolute priority dispatch could have their dispatch level set with reference to their submitted decremental prices but still be kept commercially whole in relation to their renewable support mechanisms as set out below:

1. If the imbalance price was above the decremental price of a wind generator it would be dispatched up to the level of its real time availability and receive the imbalance price and any payments due under its renewable support mechanism.
2. If the imbalance price was below the decremental price of a wind generator it would be dispatched off. Assuming the decremental price of the wind generator is negative (to reflect the lost opportunity under its renewable support mechanism) the imbalance price would also be negative and therefore, under the proposed settlement approach set out in section 3.3.1 above, the wind generator would receive zero for its incremental offer acceptance up to the level of its real-time availability. However, through its bid acceptance in the balancing market the wind generator would receive payment up to the value of its lost opportunity under its support mechanism for its reduction in output – in other words it should still receive a revenue stream that is equal to the value of its renewable support up to the level of its real time availability.
3. If the imbalance price was equal to the decremental price of the wind generator then the wind generator would be marginal and would be dispatched somewhere between zero and its real time available output. Again, assuming the decremental price of the wind generator is negative, the imbalance price would also be negative, and therefore, similar to scenario 2 above, the wind generator would not be exposed to negative pricing on its dispatch quantity. It would however receive payment up to the value of its lost opportunity under its support

mechanism for any reduction in its output below its real time availability – in other words it would still receive a revenue stream equal to the value of its renewable support up to the level of its real-time availability, either directly (for its dispatched volume) or via its bid price (for any reduction in dispatch volumes through the energy balancing actions taken by the TSO).

3.3.3 Potential advantages over de-linked option

Energia sees the potential advantages of this approach compared to the option labelled 'A Revised Approach' presented in section 5.4 of the Building Blocks consultation, could be as follows:

1. It clearly delivers a mechanism for compensation of constraints and curtailment under I-SEM trading arrangements.
2. It removes the necessity for wind farms to forecast their available output exactly in order to submit FPNs that guarantee priority dispatch up to the level of their real-time availability.
3. It thereby ensures wind generators will always be dispatched up to the level of their real-time availability providing the imbalance price is greater than their decremental price.
4. It thereby removes the commercial risk associated with setting of incremental prices.
5. It further reduces commercial risk on wind generators by guaranteeing they will receive payments that are equivalent to the value of their retail support mechanism either directly under that mechanism or via the acceptance of their decremental bids in the balancing market.

3.3.4 Removal of Priority Dispatch Status for Peat

Removal of priority dispatch status for peat should be a priority for the SEM Committee moving into I-SEM in the overriding interest of the electricity consumer, security of supply and the environment. It is anomalous to support peat-fired generation through the PSO on a security of supply basis, and to afford peat-fired generation priority dispatch in the market. If peat, as an indigenous fuel, is to provide a security of supply benefit in the long term, it should be preserved – i.e. Ireland should not be consuming it as quickly as possible and at a time when there is an abundance of alternative, albeit imported, fossil fuels that would be less costly to the electricity customer and (in the case of gas) less carbon intensive. In addition, it is grossly inconsistent for policy and market treatment to support and prioritise the generation of electricity from a carbon intensive fossil fuel such as peat given the ongoing transition to a low carbon economy.

3.4 Treatment of Curtailment

The question of compensation for curtailment is fundamental to the risks associated with wind generation participating in ex-ante market timeframes. If in-market (non de-minimus) wind generators with firm access are not compensated for curtailment this imposes the requirement for them to forecast curtailment levels when participating in the day-ahead market to minimise their exposure to differentials between the day-ahead / intra-day and balancing price. Energia believes the requirement for wind to accurately forecast their availability day-ahead already acts as a disincentive to their participation in ex-ante timeframes but augmenting this with the further additional complexity of forecasting curtailment day-ahead creates a significant barrier to wind participation in ex-ante timeframes. Curtailment will be extremely difficult to forecast under I-SEM because it is caused by dynamically changing conditions on the transmission system which themselves will be effected by the trading behaviours of participants in a continuously traded market. If wind generators therefore choose to not trade in ex-ante markets to avoid the risk of facing unquantifiable imbalance exposures because of the lack of compensation for curtailment, this will distort DAM price signals and undermine the efficiency of market coupling, which in turn could reduce the efficiency of interconnector exports further exacerbating the curtailment problem.

3.4.1 Requirement to re-assess current policy

As IWEA have stated in their response, it is obvious that the process to reach the curtailment decision took place in the entirely different context of the centrally dispatched gross mandatory pool SEM. The manner in which that decision has been transposed into an entirely new legal framework and market design without any re-evaluation or review is fundamentally flawed in terms of due process. It is flawed, as IWEA explain, because the decision was made both in advance of the SEM Committee's own decision on the High Level Design, and also in advance of the overarching regulations for the Electricity Balancing market being agreed in the Comitology process.

IWEA is therefore stating that the issue of non-compensation for curtailment does need to be reopened and re-examined in light of all new relevant facts.

Energia agrees that it is essential to re-assess the current policy decision on compensation for curtailment due to the significant change in the risks faced by wind generators under the I-SEM market design. The process to reach the curtailment decision was in the context of the SEM and may not be consistent with the Network Code for electricity balancing. The application of this policy to a class of generation would also appear discriminatory. For example, interconnectors do not provide the system with inertia and therefore contribute to the calculation of the SNSP limit however they are not treated in the same

manner as wind generators. Should curtailment remain uncompensated there should be no exposure to imbalance pricing relative to ex ante trades.

3.4.2 Compensation mechanism for curtailment

Compensation for curtailment could be implemented under the same market mechanisms as suggested for implementation of constraint compensation and priority dispatch in sections 3.1 and 3.3 above.

Providing the TSO, under I-SEM trading arrangements, are mandated to accept an offer from a wind generator in the balancing market up to the level of its real time availability (as previously discussed this offer acceptance could be allocated through settlement and priced ex-post at the maximum of the imbalance price and zero) and are required to accept a bid from a wind generator to implement curtailment, then the value of the decremental bid as submitted by a wind generator can be used as the mechanism to deliver compensation for curtailed volumes. As previously stated, if the decremental bid of a wind generator was priced to ensure it recovered the value of the lost opportunity under its renewable support mechanism this would then ensure proper compensation for curtailment under the I-SEM energy trading arrangements.

4. De-Minimus Level

There have been no substantive arguments presented in the consultation paper (or put forward by others through the RLG forum) that would justify a review of the existing de-minimus level or de minimus arrangements as a result of the introduction of I-SEM.

The additional complexity of I-SEM will increase the burden to participate and operate in the I-SEM, potentially raising the barrier to entry to the all island market. To lower the threshold of mandatory participation in the balancing market would have a material impact on existing generators which currently are not required to participate in the SEM.

The current de-minimis level of 10MW is both appropriate and necessary. It provides a lower cost and accessible route to market via suppliers and is critical to secure finance for many renewable projects by leveraging the suppliers' standing and trading sophistication with finance providers. Any reduction to the de minimus level would compromise this to the detriment of existing finance arrangements and future projects.

The current treatment of de-minimis should also continue in I-SEM as it reflects the physical reality of meeting local demand from embedded generation which is clearly beneficial. Continuation of the current policy is also important from a legacy perspective as contracts will have been struck between suppliers and generators on the basis of existing arrangements and

financing will be contingent upon this and the legitimate expectations of current policy enduring for the life of such investments.

The consultation paper refers to levels within Grid Code. However this is a system technical requirement based on the impact on the operation of the system. The specification in the European Network Code Requirements for Generators (RfG), for smaller generators connected on the Island of Ireland, relative to the specification in the RfG for generators connected in other European synchronous areas, is more stringent and therefore investors and operators have higher Grid Code compliance costs. There is no justification, with the introduction of I-SEM, to change the existing de minimis policy to reflect the threshold set out in the Grid Code, which has been justified on the basis of technical system operation requirements.

5. Treatment of Currency

Energia supports the proposal to project currency costs ex-ante and charge to suppliers as a tariff with correction factors in subsequent periods. However it is unclear how this will be implemented in practice given the potential for multiple Market Operators settling different markets. Consideration also needs to be given to the treatment of currency in capacity, ancillary services and forwards markets.

6. Market Information

Energia strongly supports the principle of transparency in relation to release of market information. We believe this policy has worked well in the SEM and it is even more important under I-SEM given the potentially significant issues the I-SEM design presents for implementing effective market power mitigation. Energia has discussed these issues at length in our previous submissions to the HLD consultation, the HLD proposed decisions and more recently in our RLG feedback to the RAs on 4th March 2015 and therefore we will not repeat them in this consultation.

Therefore, as a general principle, and to avoid any potential system restrictions on publication of information, Energia recommends that market systems are designed to facilitate the publication of as much market information as possible. It is also essential that the SEM Committee clarifies the workstream under which decisions on data publication for I-SEM will be taken. And furthermore clarifies how decisions on data publication will be taken into account under the market power mitigation workstream if taken outside that workstream.

6.1 Data publication for European ex-ante market timeframes

The consultation paper seems somewhat vague regarding the level of transparency achievable in European ex-ante market timeframes. Given the

importance of transparency to market power mitigation in I-SEM it is essential that the regulators communicate any potential restrictions on data release to participants to facilitate informed debate on their impact on effective market power mitigation. This should be done prior to commencement of the market power mitigation workstream.

6.2 Data publication for I-SEM balancing market

Energia would support similar levels of transparency in the I-SEM balance market as the current SEM. We would also support release of additional market information that will assist participants manage their balancing risks more effectively such as information on system margin, changes in system demand forecasts, changes in system wind forecasts, etc.

6.3 Compliance with European reporting obligations

To minimise the operational overhead on participants, and to remove any potential barriers this creates to new entry (particularly for smaller participants), Energia would recommend that, where appropriate, reporting requirements under European regulations (e.g. REMIT etc.) are met centrally and that all such reporting requirements are taken into account in the design of the central market systems, including, if relevant, the auction platform for interconnector products. To facilitate this end Energia would welcome further discussion on the matter.

6.4 Market Power Mitigation

Energia would strongly emphasise that while market transparency is an essential element of the market power mitigation strategy for the I-SEM (facilitating effective market monitoring), it is not, on its own, sufficient. For example, it does not address the fundamental problem of information asymmetry under the market design and therefore the benefits the design confers upon portfolio players.

Energia would stress that it is fundamentally important the SEM Committee does not underestimate the difficulties associated with implementing effective market power mitigation within the context of the I-SEM design, or the fundamental importance of an effective market power mitigation strategy to deliver competitive outcomes and encourage long term competition. We would therefore welcome further consultation by the RAs regarding the scope of the market power mitigation workstream to ensure its remit is sufficient to deliver an appropriate suite of market power mitigation measures that work holistically across I-SEM energy, capacity and ancillary services market. We believe the current focus of the workstream, on energy markets only, is too narrow.

7. Next Steps

Energia supports the minded to decision of the SEM Committee not to make a specific decision on the Building Blocks concepts until a decision is being made on the overall detailed design of the energy trading arrangements. Furthermore, as previously stated, we believe there is a pressing need for more informed stakeholder debate and further consultation on the implementation options for the policy areas covered in the Building Blocks consultation. We also see significant merit in the RAs holding industry workshops / further RLG meetings to properly debate implementation options prior to any formal consultation. This will make it significantly easier for industry to fully engage with the regulators on these important matters.