# Energia response to SEMC Consultation Paper SEM-19-024

***Balancing Market and Capacity Market Options Consultation Paper***

**12 July 2019**

# 1. Introduction

Energia welcomes the opportunity to respond to the SEM Committee ("SEMC") Consultation Paper SEM-19-024 titled "Balancing Market and Capacity Market Options Consultation Paper" (the "Consultation Paper").

The remainder of this response is structured as follows. Section 2 contains our general comments and section 3 responds to the specific questions in the Consultation Paper.

# 2. General Comments

The Consultation Paper expresses a concern over the performance of the Balancing Market ("BM") over the first five months of its operation, specifically that it has not generated price signals reflective of system fundamentals and that such prices have adversely affected capacity contract holders which are available but cannot deliver due to binding Operational Constraints.

On the basis of these concerns, the SEM Committee seems minded to hastily implement an entirely new Imbalance Pricing methodology, as described in section 2.4 of the Consultation Paper:

*"The SEM Committee is proposing to remove all System Operator Flags and Non-Marginal Flags from the imbalance pricing algorithm i.e. to use Simple NIV tagging in the Balancing Market.*

*The SEM Committee is of the view that Simple NIV tagging meets the I-SEM High Level Design, the I-SEM Detailed Design and the I-SEM market power mitigation decision; and that the modelling results show that pricing outcomes under Simple NIV tagging are preferable, given market fundamentals, to the pricing outcomes under the current methodology."*

Whilst the SEMC may have a concern that the current market rules are giving rise to inappropriate outcomes, this does not justify such a radical response, particularly so early in the life of a new market. Clean data is required for an informed analysis and any proposed changes should be more targeted and measured to address specific concerns, and progressed through the Balancing Market Modifications Committee.

**Option 1**

The proposed move to Simple NIV tagging under Option 1 in the Consultation Paper is tantamount to a new market design which is based on incorrect pricing data, outdated analysis and appears to be a knee-jerk reaction largely predicated upon the exceptional pricing events that occurred on 9th October 2018 and 24th January 2019. The probability of extreme events of this magnitude has been reduced due to the subsequent implementation of Mod_09_19 on 2nd May 2019 and observed changes in market participant bidding behaviour in the BM.

To progress with Option 1 on this basis is unjustified and heightens the risk of unintended consequences and the perception of regulatory risk in this market. It is of upmost importance to recognise that the data upon which the analysis has been prepared is flawed and incorrect given the upheld pricing disputes raised for nearly

every day of the market since go-live. We strongly advise against making sweeping changes to the Imbalance Pricing methodology, as proposed, in these circumstances when there is no counter-factual to enable proper impact assessment.

In summary, Energia does not support the implementation of Simple NIV tagging, particularly so early in the life of a new market, for reasons further explained below:

- It is to be expected that any new market will go through a bedding in period[1] before settling down as market participants become more familiar with the revised market conditions and adapt their bidding strategies accordingly.
- Clean data is required for an informed analysis of the problem, including if there is / remains a problem and what precisely is the problem that needs to be addressed.
- Any changes should be more targeted and measured to address specific concerns, similar to the approach taken in respect of the Urgent Modification implemented on 2nd May 2019, rather than hastily introduce an entirely new Imbalance Pricing methodology as proposed.
- Simple NIV tagging removes all System Operator flags and Non-Marginal flags from the Imbalance Pricing algorithm; this significantly redefines the classification of energy and non-energy actions. Simple NIV tagging therefore has the potential to significantly distort the imbalance price, and this needs to be given very careful consideration requiring a proper forum to identify if/what the problems are, and to then consider precise targeted solutions if issues are identified.
- The mixture of energy balancing actions that use Simple Orders and non-energy actions that use Complex Orders in Simple NIV tagging could create other distortions that need to be considered.
- Simple NIV tagging represents an entirely new Imbalance Pricing methodology which will invalidate energy revenue assumptions factored into market participants' bidding strategies for the T-1 and T-4 capacity auctions for CY2019/20 and CY2022/23 respectively. It will thus invalidate these capacity auctions.

**Option 2**

The concern that capacity contract holders are unduly exposed to binding Operational Constraints remains under any BM design. The solution is not to re-design the BM (or to implement an entirely new Imbalance Pricing methodology as proposed under Option 1), but to target the source of the problem which is the design of the Reliability Option ("RO").

Energia therefore strongly supports Option 2 in the Consultation Paper which would remove exposure to RO Difference Charges in circumstances where generators cannot be dispatched for network reasons but are otherwise fully available to the limit of their control. The current treatment of such units is disproportionate and inherently

[1] It is worth noting that the RAs themselves have acknowledged the need for a 'bedding in period' in the context of SEMO KPI targets in SEM-19-033 given *"the difficulties faced by SEMO at the beginning of a market that has a higher level of complexity and reporting requirements than the previous SEM"* and have accordingly determined that revised KPI incentive targets will take effect from 1st October 2019 rather than from the date of the Decision Paper *"to allow for sufficient time for SEMO to focus on stability in the market…".*

unfair, not to mention financially damaging, to the generators affected. The RO modification goes some way to addressing this and intuitively should result in a more even-handed balance of payments between generators and suppliers because it simply dis-applies Difference Charges where the TSOs are unable to physically dispatch available units for network reasons during RO events. Unlike Simple NIV tagging, this would be an efficient, targeted, and proportionate market reform that would best serve the interests of consumers. It was also widely supported by industry participants through the Modifications Committee Working Group process convened to consider Mod_32_18.

We further submit that the exemption from making uncovered RO difference payments should be extended to cover all circumstances where a capacity provider cannot meet its obligations for any system reason or TSO action or inaction, as was supported by EAI in Working Group 1 on Mod_32_18.

We find the arguments put forward by the RAs against Option 2 entirely unconvincing and without foundation for reasons summarised below and explained in more detail in section 3 of this response.

First, it is argued that this modification would lead to "a widening of the hole in the hedge". However, this is not supported by the evidence presented. In fact, the proposed RO modification will not affect the fundamental generation and supply balance that needs to be maintained regardless of constraints, and so on average it should not skew the balance of RO payments between generators and suppliers. Compare this with the current situation where there is a strong tendency, supported by the evidence, to a surplus in the Socialisation Fund that is disproportionate and inherently unfair, not to mention financially damaging, to the generators affected. In any event, where there is a shortfall because of network constraints, it is clearly inefficient and against consumer interests (for reasons explained in section 3 of this response) to impose the cost on the 'unlucky' generators affected.

Second, it is argued that this modification may introduce a hidden locational element to the Capacity Market in circumstances where the SEM Committee never intended to introduce locational pricing in the CRM. The logic being that the RO modification would incrementally incentivise new plant to locate behind an export constraint instead of inside the constrained area given the reduced risk of RO exposure. This is counterintuitive where the same exposure currently creates the reverse locational incentive, to the extent there is one (which we believe is highly questionable). In other words applying the same logic, generators located within constrained areas are currently less exposed to the risk than those located behind an export constraint, because they are less likely to be constrained for network reasons. It cannot therefore be considered a valid argument for not implementing the modification.

**Conclusion**

Energia does not support Option 1. We strongly advise against the implementation of Simple NIV tagging, which is tantamount to a new market, when there is no counter-factual to enable proper impact assessment. Basing such significant decisions on prices that are known to be incorrect represents a serious departure from evidence-based decision making. Simple NIV tagging has the potential to distort the Imbalance Price and this needs to be given very careful consideration

given its potential impact on the functioning of the ex-ante markets. Accordingly, we respectfully submit that this proposal is premature when it has yet to be established, based on a clean data set and with Mod_09_19 in effect for an adequate period of time, if there is a problem with the BM and what it is precisely that needs to be remedied.

Any proposed modification to the BM (including RA Mods) should be first progressed through the Balancing Market Code Modifications Committee which has an established track record of facilitating constructive and interactive debate and engagement between all key stakeholders and subject matter experts on complex and fundamental issues associated with market design, similar to the Market Rules Working Group process for I-SEM. Energia is fully committed to engaging constructively in this process.

Energia strongly supports Option 2. Removing exposure to RO Difference Charges where operational constraints are binding and RO holders are available to deliver is efficient and in consumers' best interests because it represents an appropriate allocation of risk. We find the arguments put forward by the RAs against Option 2 entirely unconvincing and without foundation for reasons summarised above. The exemption from making uncovered RO difference payments should be extended through other modifications, progressed in parallel, to cover all circumstances where a capacity provider cannot meet its obligations for any system reason or TSO action or inaction.

The remainder of this response elaborates on these key conclusions.

# 3. Response to Specific Consultation Questions

## Option One: Simple NIV Tagging in the Balancing Market

**Question 2.1: Do you support the Simple NIV Tagging option and its implementation in the SEM?**

Energia does not support the Simple NIV tagging option and its implementation in the SEM for reasons explained in section 2 of this response.

It is premature to completely change the methodology for imbalance pricing which is in effect a new market design. The analysis carried out to support the proposed move to Simple NIV tagging is based on comparisons of Simple NIV tagging prices against the original Imbalance Price for the first five months of the market. However, such an approach is flawed given the upheld pricing disputes in the market for this period. In addition, only using analysis from the first five months of the market is an inappropriate baseline against which to carry out a proper assessment because it fails to take into account changes in participant bidding behaviour as they adapt to the new market and the Imbalance Pricing modification (Mod_09_19) that became effective on 2nd May 2019.

Any change to the Balancing Market pricing methodology requires careful analysis of the prices being produced by the current imbalance pricing algorithm. Only then can an accurate, informed and evidence-based assessment of any problems be identified, and informed solutions proposed to remedy them. Such analysis is impossible until a clean set of correct data is available (we note that there have been no further upheld pricing disputes since the 11th June 2019) which also needs to reflect the changes to imbalance pricing that have already been implemented via the Modifications process.

The requirement for this 'clean' price data has been highlighted from an early stage in the market by industry through correspondence from the Electricity Association of Ireland ("EAI") to EirGrid which stated *"it is clear that the immediate priority is to obtain a reasonable period of 'clean' data from which to access the outcomes in the market and to identify potential issues"*[2]. It is also worth noting that the RAs themselves have acknowledged the need for a 'bedding in period' in the context of setting SEMO KPI targets in SEM-19-033 given *"the difficulties faced by SEMO at the beginning of a market that has a higher level of complexity and reporting requirements than the previous SEM"* and have accordingly determined that revised KPI incentive targets will take effect from 1st October 2019 rather than from the date of the Decision Paper *"to allow for sufficient time for SEMO to focus on stability in the market…".*

**Question 2.2: Do you have any concerns regarding moving to Simple NIV tagging in the Balancing Market, including the risk of unintended consequences? If so, please explain these concerns.**

Energia is concerned that the changes caused by a move to Simple NIV tagging will distort the imbalance price given how this redefines the classification of energy and non-energy actions. For example, under the current Imbalance Pricing methodology,

[2] EAI letter to EirGrid on 9th November 2018

when a unit is operated at their lower operating limit by the TSO to manage the constrained nature of the power system they have no direct influence on the Imbalance Price (as it cannot set the Price Marginal Energy Action, "PMEA"). . When those units are dispatched off their lower operating limits, they can become a marginal action and have the ability to influence the Imbalance Price. We believe this is an appropriate approach and correctly defines when this unit is utilised for non-energy and energy reasons. However, our concern is that under the Simple NIV tagging approach this unit will have the ability to influence the PMEA and hence directly impact the Imbalance Price at any output level i.e. including when operating at their lower operating level which is usually a constrained action. This will result in a huge uplift in the quantity of 'constrained' actions available in the ranked set given the highly constrained nature of the all-island power system. Such an outcome is undesirable and has the potential to significantly distort the imbalance price and its interaction with ex-ante markets in a way that could undermine price signals to be Balance Responsible.

To minimise the risk of unintended consequences, we caution that any change to Imbalance Pricing requires careful analysis of the prices being produced by the current Imbalance Pricing algorithm as discussed above in response to question 2.1.

Furthermore, as stated in section 2, we suggest that any modification to the BM should be progressed through the Balancing Market Code Modifications Committee which has an established track record of facilitating constructive and interactive debate and engagement between all key stakeholders and subject matter experts on complex and fundamental issues associated with market design, similar to the Market Rules Working Group process for I-SEM.

**Question 2.3: Do you agree or disagree that Simple NIV Tagging meets the I-SEM High Level Design, the I-SEM Detailed Design and the I-SEM market power mitigation decision? If you disagree, please explain why.**

Following detailed consideration involving all key stakeholders and subject matter experts through the Market Rules Working Group process and the consultation that followed, the current BM design (i.e. Tagging and Flagging) was considered the most appropriate given the intent of the I-SEM High Level Design ("HLD") to identify the marginal cost of energy actions and the characteristics of the all-island market with high levels of constrained TSO actions required to manage the system safely and securely.

Under the current Imbalance Pricing methodology, when a unit is at their lower operating limit by the TSO to manage the constrained nature of the power system, they have no direct influence on the Imbalance Price (as it cannot set the Price Marginal Energy Action, "PMEA"). When those units are dispatched off their lower operating limits, they become a marginal action and have the ability to influence the Imbalance Price. This is an appropriate approach and correctly defines when this unit is utilised for non-energy and energy reasons, consistent with the intent of the HLD. However, under the Simple NIV tagging approach this unit would have the ability to influence the PMEA and hence directly impact the Imbalance Price at any output level. This is because Simple NIV tagging removes all System Operator flags and Non-Marginal flags from the Imbalance Pricing algorithm, significantly redefining the classification of energy and non-energy actions. Accordingly, Simple NIV tagging

has the potential to significantly distort the Imbalance Price and the functioning of the ex-ante markets (unlike the current Tagging and Flagging methodology) and cannot be considered consistent with the intent of the HLD or more importantly be considered appropriate for I-SEM.

In summary, the more fundamental question is whether Simple NIV tagging is appropriate for I-SEM not whether it meets the I-SEM HLD, Detailed Design or Market Power Mitigation Decisions. We submit that Simple NIV is not appropriate for I-SEM for the reasons explained briefly above.

Furthermore as explained in section 2 of this response, the proposed move to Simple NIV tagging under Option 1 in the Consultation Paper is tantamount to a new market design which is based on incorrect pricing data, minimal up-to-date analysis and appears to be a knee-jerk reaction largely predicated upon the exceptional pricing events that occurred on 9th October 2018 and 24th January 2019. The probability of extreme events of this magnitude has been reduced due to the subsequent implementation of Mod_09_19 on 2nd May 2019 and observed changes in market participant bidding behaviour in the BM. To progress with Option 1 on this basis is unjustified and heightens the risk of unintended consequences and the perception of regulatory risk in this market. It is of upmost importance to recognise that the data upon which the analysis has been prepared is flawed and incorrect given the upheld pricing disputes raised for nearly every day of the market since go-live. Basing such significant decisions on prices that are known to be incorrect represents a serious departure from evidence-based decision making, and must be avoided.

For the avoidance of doubt, we also submit that Simple NIV tagging cannot be considered consistent with the intent of the HLD which renders any consistency with the Detailed Design a moot question.

**Question 2.4: Do you agree or disagree with SEM Committee's assessment that the pricing outcomes under Simple NIV tagging are preferable, given market fundamentals? If you disagree, please explain why.**

As discussed above and in section 2 of this response, it is not possible to reliably determine if the pricing outcomes under Simple NIV tagging are preferable to current Imbalance Prices based on the first five months of market operation as those prices are known to be incorrect. Therefore, the requirement for a period of clean price data, which takes into account the impact of Mod_09_19 and changes in participant bidding behaviour, is necessary for an informed analysis to determine if there is a problem with the BM and what it is precisely that needs to be remedied.

Simple NIV tagging also has the potential to distort the Imbalance Price and this needs to be given very careful consideration given its potential impact on the functioning of the ex-ante markets. A proper forum is required to identify if/what the problems are, and to then consider solution options for whatever issues are identified, and concluding with a robust impact assessment of any proposed changes.

Therefore, rather than prematurely introduce what is, in effect, an entirely new BM design through this consultation process, Energia strongly advises a more measured and targeted approach to identify potential issues and solutions in a considered manner, with the involvement and engagement of industry.

We therefore suggest that any proposed modification to the BM should be first progressed through the Balancing Market Code Modifications Committee which has an established track record of facilitating constructive and interactive debate and engagement between all key stakeholders and subject matter experts on complex and fundamental issues associated with market design, similar to the Market Rules Working Group process for I-SEM. Energia is fully committed to engaging constructively in this process.

## Option Two: Removal of Difference Charges where Operational Constraints are binding

**Question 3.1: Do you support this Capacity Market option and its implementation in the SEM?**

Yes, Energia is strongly supportive of the Capacity Market option presented in the Consultation Paper to remove exposure to RO Difference Charges where operational constraints are binding and RO holders are available to deliver but are not dispatched up to their RO MW level.

The RO design assumes that a capacity market participant will be able to secure a contract position in one of the ex-ante spot energy markets or will be dispatched by the TSO via the BM, whenever the energy market price exceeds the strike price set for the capacity mechanism. The premise behind this assumption was that the strike price will only be reached at times of capacity scarcity, and therefore capacity market participants will be able to sell their output via spot energy markets, or via the BM to cover their exposure to difference payments.

However, this is not accurate for various reasons, including, as exemplified by experience in the market to date, where generators have been exposed to RO difference payments (triggered by RO events, not administered scarcity pricing) where they were available but not dispatched up by the TSOs because of binding operational constraints on the system. This is clearly an unintended consequence of the RO design that persists despite changes made to BM pricing via Mod_09_19 (i.e. exclusion of system operator flags when certain constraints are effective) and should be addressed as a matter of priority. The solution is not to re-design the BM (or to implement an entirely new Imbalance Pricing methodology as proposed under Option 1), but to target the source of the problem which is the design of the Reliability Option.

Energia therefore supports Option 2 in the Consultation Paper. Unlike Simple NIV tagging, this would be an efficient, targeted, and proportionate market reform that would best serve the interests of consumers. It was also widely supported by industry participants through a Modifications Working Group process. Other modifications, such as the variation(s) of Mod_32_18 supported by EAI (as documented in the Working Group Recommendation Report[3]) should be progressed in parallel to cover other circumstances where a capacity provider cannot meet its obligations due to TSO dispatch decisions.

[3] See Working Group Recommendation Report for Mod_32_18 issued 5th July 2019.

**Question 3.2: Do you have any concerns regarding the removal of Difference Charges where Operational Constraints are binding, including the risk of unintended consequences? If so, please explain these concerns.**

Removing exposure to RO Difference Charges where operational constraints are binding and RO holders are available to deliver is efficient and in consumers' best interests because it represents an appropriate allocation of risk.

As a general rule, risk should be apportioned to the party best placed to manage that risk. Generators have absolutely no control over operational constraints on the system and are therefore in no position to manage these risks. These risks should therefore be socialised and managed by the TSOs on behalf of the consumer, in a similar way that constraint costs are efficiently allocated and managed.

If generators are forced to bear the cost of risks completely beyond their control and that are highly uncertain (capped only by a stop loss limit of 1.5 x annual capacity receipts), this can only result in higher capacity prices (reflecting a premium for this uncertain and unmanageable risk) and / or a disincentive to invest in the provision of capacity.

We find the arguments put forward by the RAs against Option 2 entirely unconvincing and unfounded. We address these arguments below.

*Hole in hedge*

The Consultation Paper presents limited analysis based on two dates (9th October 2018 and 24th January 2019) and considers the impact of Option 2 on the balance of RO payments between generators and suppliers. On 9th October 2018 a potential shortfall in the Socialisation Fund of €0.487m is estimated, albeit this is subject to uncertainty due to a known issue in the systems at that time. On 24th January 2019 a surplus of €1.14m in the Socialisation Fund is estimated. On balance the Socialisation Fund would have been over €0.65m in surplus over these two events.

It does not necessarily follow therefore that this modification would lead to "a widening of the hole in the hedge", as suggested in the Consultation Paper. In fact, the proposed RO modification will not affect the fundamental generation and supply balance and so on average it should not skew the balance of payments between generators and suppliers. Even where a constraint issue exists, the TSOs will address the system imbalance by dispatching generators it can utilise and hence there should, in most circumstances, be an equivalent MW of generators receiving above RO strike prices to the MW of suppliers paying that price.

Viewed from another perspective, there is currently a strong tendency to a surplus in the Socialisation Fund. This is borne out by the evidence presented in the Consultation Paper where a surplus of c€5.6m was generated over just two events. This is disproportionate and inherently unfair, not to mention financially damaging, to the generators affected. The RO modification goes some way to addressing this and intuitively should result in a more even-handed balance of payments because it simply dis-applies Difference Charges where the TSOs are unable to physically dispatch available units for network reasons during such events. In circumstances where there is a shortfall for this reason, it is clearly inefficient and against consumer

interests (for reasons explained above) to impose the cost on the 'unlucky' generators affected.

As a final point, the RAs seem to suggest that there is less imperative to implement the RO modification as Mod_09_19 implemented in May 2019 has reduced the likelihood of extreme prices. This argument does not stand up to scrutiny as Mod_09_19 does not eliminate the risk which continues to be an unnecessary and inefficient source of unmanageable risk to generators that should be addressed as a matter of priority.

*Distortion of incentives for location of new capacity*

It is argued that this modification may introduce a hidden locational element to the Capacity Market in circumstances where the SEM Committee never intended to introduce locational pricing in the CRM. The logic being that the RO modification would incrementally incentivise new plant to locate behind an export constraint instead of inside the constrained area given the reduced risk of RO exposure. This is counterintuitive where the same exposure currently creates the reverse locational incentive, to the extent there is one (which we believe is highly questionable in any event). In other words, applying the same logic generators located within constrained areas are currently less exposed to the risk than those located behind an export constraint, because they are less likely to be constrained for network reasons. It cannot therefore be considered a valid argument for not implementing the RO modification.

**Question 3.3: Do you consider this proposed change is in keeping with the broader CRM detailed design? Please explain your view.**

Energia is satisfied that the proposed modification is in keeping with the CRM detailed design and does not in any way contradict key principles. The modification seeks to provide protection to generators so that they should not be exposed to an unmanageable risk which was never the intention of the CRM design. Whilst an element of risk to RO holders is necessary so that there is incentive for the capacity provider to perform, the scenario of a capacity provider not being able to increase its scheduled output when available due to an operational constraint is not addressed. As such, we do not consider introducing a modification to address this issue as being contrary to any elements of the design.

**Question 3.4: Do you have any views on this option from a consumer perspective?**

Removing exposure to RO Difference Charges where operational constraints are binding and RO holders are available to deliver is efficient and in consumers' best interests because it represents an appropriate allocation of risk. See response to question 3.2 for further discussion of this point.

**Question 3.5: Do you have a strong view regarding any alternative option which could be implemented i.e. preferably only requiring a configuration change rather than a system change?**

For reasons explained above, the proposed modification is required to reduce inefficient and excessive exposure to RO Difference Charges. It is also readily implementable. Given that this was discussed at the Balancing Market Modifications

Committee Working Group in February and March 2019 and received widespread support, and that it only requires a configuration change to implement rather than a system change, we believe it should be progressed as a priority.

However, whilst acknowledging the relief that this modification proposal would provide, we note that it does not cover all of the potential risks of unintended RO Difference Charges that a generator may be exposed to. This is particularly relevant to potential exposure caused by TSO dispatch actions which subsequently prevents the generator from responding to a RO event whenever there is no binding operational constraint. The Consultation Paper states that this modification will *"include units that are included in the constraints that are available to deliver but OFF at the time".* However, if a unit is dispatched off by the TSO just prior to a RO event occurring, technical constraints of the unit such as minimum off time may prevent it from being available to deliver as a result of TSO action. Accordingly, Energia would like to see this remaining exposure to generators addressed as soon as possible, in parallel with the SEMO modification, through further development of appropriate alternative options.