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Lissarda Business Park,  
Lissarda,  
Co. Cork

11<sup>th</sup> January 2018

**Re: Proposed Decision Paper on Transition of Electricity Support Schemes to I-SEM Arrangements**

Dear Sir / Madam,

Firstly, thank you for the opportunity to comment on the Proposed Decision Paper on Transition of Electricity Support Schemes to I-SEM Arrangements. Invis Energy is Ireland's second largest independent wind energy generator and are one of Ireland's largest developers and operators of wind energy. We have developed and built, or are currently building, over 500MW of wind farms under REFIT, 18% of Ireland's installed capacity.

#### **Background and Context**

With its existing portfolio of projects, and pipeline of future projects, Invis Energy (a partnership between Enerco Energy – part of the Craydel group and Asper Investment Management - formerly named HgCapital) has made a significant contribution towards the Republic of Ireland's efforts to meet its 2020 Renewable targets, and we are keen to be part of the solution in achieving the forthcoming 2030 targets.

We note, and strongly agree with, the three core objectives of energy policy; of security, sustainability and competition and the concept of balance responsibility for renewable energy generators under I-SEM. Invis Energy are keen to work with DCCAIE and other partners to help Ireland achieve these goals.

As noted in the papers High Level principles, striking a fair and reasonable balance between REFIT support and the PSO levy plays an essential role in achieving these goals. On the one hand it provides a clear investment signal to enable renewable projects to go ahead, and on the other hand it does not burden the consumer with excessive costs, and is sensitive to the way these costs are presented to the consumer via the PSO.

The High-Level principles also note the need to minimise impact on market operation and liquidity and ensure compliance with state aid rules. We very strongly agree with this, and whilst it is outside the remit of this paper, we would strongly emphasise the need for a liquid forwards power market in Ireland, which would provide the clear investment signal itself and substantially reduce, or even negate, the requirement for the PSO levy.

This response is submitted by Invis Energy and reflects our own particular views, it should be noted that we are actively engaged as a member of IWEA and strongly endorse IWEA's response to the paper.

## **Detailed Response**

### *Risk Mitigation for variable generators*

Unlike non-variable generation units whose output can be shaped to their forward sales and adjusted to trades in forwards, day ahead and intraday markets, the output of wind units cannot. Therefore, wind units face a much greater exposure to balancing mechanism prices. Consequently, and as noted on Pg 11 of the Proposed Decision Paper, basing the price against which REFIT payments are struck purely on Day Ahead prices, as in Option A, erodes the current support levels afforded to wind and potentially puts existing projects at risk.

Whilst both Options B & C provide some level of mitigation they both fall significantly short of the project lifetime guarantee; which REFIT was set up to provide. Nonetheless they are both far superior to Option A, which significantly endangers both existing and potential future wind projects, putting in jeopardy sustainability and security of supply, whilst diminishing competition. Because of this threat to not just one, but all three, core objectives of energy policy, Option A is completely unacceptable.

Option C has been successfully proven in the Dutch market, however, we are unaware of Option B having been implemented elsewhere and are concerned over there being unforeseen, and perhaps unforeseeable, consequences of implementing Option B, which were not intended.

Furthermore, Option C is inherently simple for investors to understand, whilst Option B requires detailed knowledge of a market that is not yet functioning. With the spectre of the financial crisis still in lenders minds, and given the extra uncertainty caused by Brexit, there is the risk that such an option could spook lenders and investors, unintentionally threatening sustainability and security of supply.

### *Ensuring Balance Responsibility and ex ante market participation*

Invis Energy, and our colleagues in IWEA, understand and accept the need for balance responsibility and welcome that in I-SEM. However, it is neither fair, nor reasonable, to allocate these costs to REFIT generators, which threatens the sustainability objective of energy policy.

Other countries, the UK for example, have taken a strong and consistent stance on grandfathering and there is no reason Ireland cannot do the same. The decision criteria, whilst logical and politically relevant, seem not to relate to REFIT's legal and regulatory structure and we believe more relevant considerations are being neglected.

The costs of system balancing are not new, and are currently levied through the Imperfections and Market Operator charges. Whilst we understand the concern that such "invisible" charges could cause problems if added to the PSO levy, these charges will be no more visible than they are today, when they are levied by suppliers on consumers. It is unfair and illogical to simply pass this cost onto REFIT generators rather than face up to, and address, the problem.

We would also like to express our concern that I-SEM is going live without XBID, which is a fundamental part of any wind generators toolkit in balancing intraday. This is exacerbated by the fact that balance responsibility is on a unit, rather than portfolio basis, unlike for example the GB BETTA market, where one's own portfolio can be used to aid balancing responsibly. To ask wind generators to be balance responsible without giving the tools with which to do so seems entirely unreasonable, and ultimately self-defeating.

As noted above, we strongly feel that the establishment of a liquid forwards market would greatly reduce the burden placed on the end consumer by the PSO levy, whilst simultaneously providing a clear investment signal for future power stations of all kinds. Such a forward market needs a credible reference price against which forwards contract can be struck.

The credibility of this reference price is greatly enhanced by the volume of ex ante trades, which define it. This prevents it, and in turn the forward market, being gamed, distorted or abused. This need for ex ante market participation further drives the need for balance responsibility.

In our view all three options provide such a signal in that the performance of wind units is assessed predominantly against the Day ahead market price, though the inclusion of an element of imbalance pricing in Option B could perhaps provide less of an incentive to trade day ahead.

#### *Market Price Definition*

We strongly agree that the relevant market price should be generation weighted, rather than time weighted, as to do otherwise would present wind generators with a form of risk that they could not hedge, namely the difference between a baseload shape and the shape of their actual generation. To do so would significantly endanger current projects under REFIT and severely deter the construction and commissioning of new projects, which would in turn undermine all the three core objectives of energy policy.

If Option B were chosen, REFIT payments must be on a half hourly, generation weighted, basis for each individual project.

We note that Option B, unlike Option C, is based on clearly defined market prices that are independent of an organisations size or resources. This provides a level playing field for all wind generators, and the 70/30 split for units below 5MW encourages the development of smaller projects, which may be of particular assistance to community-led sites.

Given the variable nature of wind energy generation and the inevitability that, even were there a liquid intra day continuous market, some volume will be traded in imbalance. Consequently, the explicit link to imbalance price in Option B provides a clear advantage over Option A.

#### *Collateral requirements under I-SEM*

Under the current SEM, wind generators are price taking units, but, as net producers of power, their collateral requirement is minimal. Under I-SEM, wind generators under REFIT remain price takers, however, their collateral requirement increases enormously for unintended reasons.

The reason for this is that the SEM is settled ex-post and units are paid the SMP, whereas under I-SEM, the day-ahead market is scheduled by the Euphemia algorithm and is *ex-ante*. Admissible bids for the Day Ahead Auction must be between the Euphemia minimum, -€500/MWh, and maximum, +€3000/MWh prices.

Consequently, as price takers, wind generators under REFIT will bid between -€500/MWh and €3000/MWh, and so must be collateralised for selling all their volume at -€500/MWh. For a windfarm of 50MW size, on a windy day, this would mean posting collateral of €600,000.

This issue applies solely to units under REFIT, thermal units in comparison, who can control their output, will simply bid down to their marginal cost and if they are not scheduled will not run. This obviously does not apply to wind generators, who, in a centrally dispatched market like the I-SEM, cannot legitimately control their output.

Whilst this could be dealt with by wind generators bidding down to just €0/MWh, which would resolve the collateral issue, this would put them at very significant risk if the Day Ahead price does turn negative. This is because all their volume would be sold into the balancing mechanism at a time when prices are likely to be extremely penal, delivering a price far below that of any of the three options. Furthermore, because the I-SEM is centrally dispatched, they cannot legitimately control their output and avoid such penal prices.

This increased collateral requirement is clearly extremely onerous, and an unintended consequence of REFIT under I-SEM. As trading under I-SEM is done on a unit by unit basis, we would strongly recommend that this issue is remedied prior to I-SEM go live, as this may violate EU directives on equal treatment.

Potential solutions could include:

- Units under REFIT are exempted from posting collateral
- DCCAE underwrites the collateral requirement for REFIT units only and recoups the cost through the PSO
- SEMO underwrites the collateral requirement for REFIT units only and recoups the cost through the Imperfections charge

### *Capacity Market Revenue*

Participation in the CRM isn't viable for wind units, so we agree with DCCAE that capacity market costs should be excluded from market revenue calculations.

### *Amendments to existing Power Purchase Agreements*

We note from p26 of the Proposed Decision paper that, whilst the I-SEM market is set to go live on May 23<sup>rd</sup>, 2018, "the Department may facilitate changes of supplier to come into effect in the new PSO levy year". Given that the PSO levy year start on October 1<sup>st</sup> 2018, more than 4 months after I-SEM go live, this creates a significant time risk for PPA holders.

However, given the complexity of issues such as R-factor reconciliation it is unreasonable to novate away from such a contract during a PPA year. To ensure a fair and practical solution we would recommend that the Department do not allow changes to PPA contracts until October 1<sup>st</sup>, 2018.

Additionally, we strongly believe that *the decision for a PPA holder to novate should be a purely commercial one, made by the PPA holder, and not one that is permitted under exceptional circumstances only*. This could potentially lead to PPA holders being held to contracts they wish to exit, reducing competition, in violation of one of the three core objectives of energy policy.

#### **Responses to Questions posed in the Consultation paper**

##### **Proposed Decision 1:**

*The market revenue calculation for the purposes of calculating the PSO levy for supported wind generation (AER, REFIT 1 & 2) will be amended to adapt to the Integrated Single Electricity Market.*

*The market revenue calculation for wind generators will, for the energy component, be based on the lower of a blend of 80% of the Day Ahead Market Price and 20% of the Balancing Market Price, and the Day Ahead Market Price for all supported wind generators above 5MW capacity.*

*For De minimis supported wind generators, the market revenue Calculation will, for the energy component, be based on the lower of a blend of 70% of the Day Ahead Market Price and 30% of the Balancing Market Price, and the Day Ahead Market Price.*

##### **What are the views of respondents on this proposal?**

As noted above we believe that REFIT should be fully made whole and this is poor policy, going back on the arrangements made, and not in spirit of grandfathering.

Furthermore, whilst both Options B & C provide some level of mitigation they both fall significantly short of the project lifetime guarantee, which REFIT was set up to provide. Nonetheless, they are both far superior to Option A, which threatens all three core objectives of energy policy and is completely unacceptable.

Whilst Option B has some advantages, in providing a partial hedge against both Day Ahead and Imbalance price, we believe its overall complexity makes it difficult for lenders to comprehend vis a vis Option C and, in the end, provides a barrier to new entry.

Consequently, Invis Energy endorse Option C.

##### **Proposed Decision 2:**

*The market revenue calculation for the purposes of calculating the PSO levy for other supported generation (under REFIT 1, REFIT 2, REFIT 3 and the Peat PSO Scheme) will be amended to adapt to the Integrated Single Electricity Market.*

*For these generators (peat, hydro and biomass) supported under the PSO levy, the market revenue calculation for the energy component will be based on the Day Ahead Market Price.*

##### **What are the views of respondents on this proposal?**

Due to the ability of such units to follow a defined load profile we tend to agree with the proposed decision.