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Response to the ETA Markets Consultation Paper (SEM-15-026)

To: Kenny Dane	Kevin Hagan
Utility Regulator	Commission for Energy Regulation
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1. Introduction

Invis Energy welcomes the opportunity to provide feedback to the joint Regulatory Authorities (RAs) following the latest extensive ETA consultation process. Invis Energy would like to commend the thorough approach taken to communicating with industry participants throughout the consultation process.

Invis Energy was established in 2011 and is a joint venture between HgCapital's Renewable Energy Fund and the Craydel Group, an Irish engineering company for the development, construction and operation of on-shore windfarms in Ireland. Invis Energy currently has 87MW across two wind farms in operation, 65MW under construction and a substantial project pipeline of over 500MW representing around a quarter of wind farms expected to be built in Ireland through to 2020.

This response focuses on the key principles that will support the design of effective ETA markets, with a focus on the most important design issues Invis Energy sees for wind generators and its portfolio of on-shore windfarm projects. Invis Energy believes that the issue of market power is the one of the most concerns for all participants and end consumers and must not be undermined in the ETA markets design. The Irish power system is a small, physically constrained market with ever-increasing levels of wind generation. As wind penetration continues to grow towards 2020 targets and become the largest contributor to the dispatch stack, significant reliance will be placed on the remaining thermal generators who will frequently find themselves in positions where they can influence prices as a result. Invis Energy recognises and commends the RA's intent to address the issues and recommends that market power is given consideration during all design decisions made by the RAs.

Invis Energy also believes that the ETA markets design, and all aspects of I-SEM, should take into account the realities of the Irish power system as described above and the explicit intention for the

market to comprise a very substantial portion of wind generation, and should adopt measures that reduce potential volatility and cost (to generators, suppliers and especially consumers) that would result from failing to take these factors into account. As we have set out below, such measures specifically include including the SNSP constraint into EUPHEMIA and design of the balancing market to minimise cost, volatility and market power.

2. Balancing Market

2.1. System Operation (early actions)

Invis Energy accepts that the TSO will have to take early non-energy actions to resolve constraints, reserve requirements, etc. Appropriate rules and processes should be imposed on the TSO so that these actions are given serious consideration and only performed where completely necessary for system security, and not for instance because of the discretion of a particular NCC operator.

In terms of early energy actions, it is imperative for effective and functional operation that the market is allowed to solve the supply-demand balance on its own. This will produce the most economical solution and greatest benefit for the end consumer and is the reason deregulated electricity markets exist. Early intervention by the TSO would introduce non-economic price signals which will undermine the competitive nature of the market and should be extremely discouraged through the market design rules. The market should be trusted to do what it is designed for: find the most economical solution for the supply-demand balance.

2.2. IDM – BM Interaction

At this early stage the substitutive approach for interaction between IDM and Balancing Market (BM) volumes appears to be favourable. This approach gives a participant the opportunity to achieve a better price in the Intraday Market than the price they would receive in the BM for their BOA without altering the position the TSO contracted them for. This is beneficial as participants will not be forced into a position where they miss out on potential revenue by providing a service to the TSO. However if a participant does have an incremental or decremental bid for a certain MW quantity accepted by the TSO, then that party should be entered into a contractual obligation to produce that MW quantity and should be penalised for trading away from that contractual position.

2.3. Imbalance Price

The formation of the single imbalance price is one of the most crucial design decisions outstanding for the ETA consultation. It is important when making this decision that the outcome or goal of the design process is considered – what exactly should the I-SEM imbalance price represent or look like? Invis Energy believes that in effectively designed, efficiently run electricity markets, Imbalance prices are intuitive and reflect actual market signals and conditions. If the system is short, prices are high, and if the system is long, prices are low. The relationship between market conditions and prices should be directly related, economically driven and transparent. Invis Energy believes that implementing an overly “academic” algorithm will introduce a disconnect between market conditions and imbalance prices. These issues are

currently seen in the SEM through the uplift phenomenon which introduces volatility which is not related to market conditions. This causes undue uncertainty for participants and potential investors and is seen as one of the reasons for poor forwards liquidity and distorted cross border trade in the SEM.

Invis Energy therefore believes that the RAs should consider the other options which involve setting the imbalance price through direct categorisation of actions taken by the TSO, which will directly link imbalance prices to market conditions.

2.4. Imbalance Settlement & Curtailment

Invis Energy believes that imbalance prices should be published promptly after closure of a settlement period to enable participants to trade effectively in the BM.

Invis Energy supports the proposal for the “deemed decremental bid” price of zero or negative for variable RES units which is discussed in Section 9.5 “Settlement of Priority Dispatch when constrained down”. For example, a decremental price of 0 EUR/MWh for price taking wind generators would enable them retain all market revenue for their firm access quantity when constrained down. In other words, firm generators will be compensated based on their availability regardless of any constraints applied to them. This reflects current SEM rules and should be maintained in the I-SEM.

Invis Energy strongly disagrees with the proposal for non-firm wind generators to be cashed out at the system imbalance price. Such a measure would expose non-firm generation to a price risk which would be a disincentive to participate in ex-ante markets. This directly contradicts the I-SEM HLD assertion that participants should be incentivised to participate in ex-ante markets. Invis Energy would like to see an alternative solution where non-firm generators with ex-ante trades who are constrained down had to pay back the constrained volume at the price of their ex-ante trades. This would remove the risk of undue losses upon curtailment for non-firm generators and therefore remove the disincentive of ex-ante trading.

Finally, Invis Energy would like to reiterate the widely-held industry belief that the SEM Committee (SEMC) decision to terminate wind curtailment compensation from 2018 is discriminatory and ill-founded. Wind energy will increasingly play a key role in the Irish electricity sector and Irish society by reducing consumer electricity bills, carbon emissions and reliance on foreign fuel imports. The decision to single out wind generation and apply separate curtailment reimbursement rules to other generators is therefore harming to Irish society as a whole. Furthermore, the logic behind the SEMC decision no longer holds credence in light of delays in system reinforcements and the DS3 programme. With this in mind, Invis Energy strongly believe that the SEMC should reassess the 2018 curtailment decision and as a minimum delay its implementation in line with the delayed DS3 implementation milestones

3. Market Power

Invis Energy recognises and commends the RA’s evident intent to address market power in the I-SEM through the Market Power workstream. Invis Energy would like to impress upon the RAs that the ETA design must explicitly account for and mitigate market power activity such as units submitting

inflated prices when they are in a position of market power at the detriment of other participants and the end consumer.

The Irish power system is a small, physically constrained market with ever-growing levels of wind. As wind penetration continues to increase towards the target 40% of generation, situations where the majority of system demand is met by wind will be common place. This will place significant reliance on the few thermal generators dispatched to meet remaining demand, who will find themselves in positions where they can influence prices significantly as a result.

Invis Energy believes the BM and imbalance prices will be particularly exposed to the influence of market power, especially during times where wind generation represents the majority of supply in the market (potentially up to 75% of demand). During such situations, the TSO will likely require the few thermal generators dispatched at the time to adjust their position in the BM for system security and will be obliged to accept their bids/offers regardless of price. This places such thermal generators in a position where they can adversely affect the imbalance price at the detriment of other participants and the end consumer.

It is clear that such issues must be directly addressed in the detailed design. Invis Energy supports any measures which will help mitigate market power, such as the suggestion at a recent public forum that would allow RAs to retroactively replace bid curves with costs curves for participants who the RAs deem to have exerted market power or regulated cost-reflective bidding. It should be noted that additional remuneration will be available from capacity payments and ancillary service payments and that minimising cost and price volatility in the BM and imbalance prices will directly result in lower cost to consumers.

4. DA Market

Invis Energy accepts that the Day-Ahead (DA) market design is already determined to an extent via the implementation of the EUPHEMIA algorithm used by the PCR. There is, however, a history of the EUPHEMIA algorithm being modified to accommodate new entrants such as Spain and Italy. It is clear therefore that there is precedent for the DA auction to be tailored to fit the Irish market and its unique characteristics, namely the issue of the SNSP constraint.

The I-SEM HLD states that the schedules produced by the DA auction should reflect a feasible system dispatch as much as possible. This will prove impossible if there is no consideration given to the SNSP constraint when producing DA schedules, as it will result in high levels of wind curtailment, sub-optimal interconnector flow and the burden of expensive retroactive balancing actions by the TSO. This would be particularly counter-intuitive given a key objective of I-SEM is more efficient market coupling.

These inefficiencies currently experienced in the Irish market will only intensify as wind penetration increases to meet 2020 targets and beyond. The design of this completely new market offers the opportunity to proactively address the issue of wind curtailment and Invis Energy would like to impress the importance that the RAs seize this opportunity and design a DA auction which can dispatch wind in a realistic manner without the need for retroactive curtailment. Invis Energy believes that designing for realistic dispatch of wind in this way will have a materially beneficial effect on the efficiency of the market, avoid the imposition of unfair cost on market participants and result in reduced cost to consumers.

5. Intraday Market & Interim Arrangements

Invis Energy believes that it is important that the interim Intraday Market (IDM) arrangements implemented at I-SEM go-live are consistent with the Target Model IDM design which is currently being developed and will be rolled out across Europe in the future. This will be the most efficient, cost-effective approach and will allow seamless transition to the coupled EU IDM when it is implemented in the future. Considering that the GB market already runs both a continuous IDM and several Intraday auctions, it would appear that the most obvious solution would be for the I-SEM IDM to replicate this format exactly, as the Irish market will be required to “plug in” to the GB market and the GB Intraday model represents the aforementioned IDM target model that the I-SEM will be required to implement in the future.

6. Physical Notifications

The purpose of Physical Notifications is to provide the TSO with the best possible information on generator dispatch. As discussed in the consultation paper, the TSOs make forecasts of aggregate wind generation output. These forecasts are likely to be more accurate than the sum of individual participants' forecasts for their site, as would be expressed through PNs. Invis Energy therefore believes that wind generators should have the option to opt out of submitting PNs and by extension, should not be subject to the associated Information Imbalance charges. The option to submit PNs should, however, remain open to wind generators, some of whom may wish to enter the market as future technology developments may enable greater levels of dispatch control for new wind participants.

Invis Energy prefer Option 3: “Physical Notifications Reflecting the Best Estimates of Intended Generation or Demand”. This option will allow the greatest level of flexibility for participants and will help stabilise prices between market stages more effectively. This should help reduce overall wind balancing costs.

7. REFIT Decision & Implications for the ETA design

Invis Energy is aware that the DCENR is currently working on a decision regarding the operation of the existing REFIT support schemes under the new I-SEM. Invis Energy believes that without confirmation that units with REFIT support will be able to recover the cost of participating in the BM and without clarity on the way that units with REFIT support will be incentivised to participate ex-ante, the RAs cannot possibly make informed design decisions to achieve a functional market. Invis Energy would therefore like to impress upon the RAs that it is important that they co-ordinate with the DCENR to expedite a decision.

8. Market Information

Invis Energy supports the proposal that the TSO will publish market data to participants during the IDM.

Such information will benefit all market participants in adjusting their ex-ante positions during the IDM, thus reducing the requirement for TSO intervention in the BM.

Yours sincerely

A handwritten signature in blue ink, consisting of several fluid, overlapping loops and strokes, positioned above a horizontal line.

Emma Tinker

For and on behalf of **Invis Energy**