

Bord Gáis Energy's Response
***“Electricity Support Schemes: Transitioning to I-
SEM Arrangements Consultation”***

11th January 2018

1. Context for BGE's position

1.1 The Regulatory and Legislative Landscape

As the all-island electricity market moves to an integrated, dynamic market (“the I-SEM”), and given the trajectory of European legislation, pressure is being put on all market participants to trade proactively and efficiently across the markets¹. In redesigning the settlement terms of the existing renewable support schemes, cognisance must be given to the objectives of the market alongside both the price certainty which REFIT was designed to provide and the relevant State Aid Approvals that Ireland has obtained.

As a starting point, we cannot ignore the State Aid Approvals that Ireland has received both in 2010 for the current REFIT 2 mechanism and in 2017 for the design of the I-SEM capacity market. Paragraph 53 of the 2010 State Aid approval provided that “the aid is granted in order to compensate for the difference between the costs of producing energy from renewable energy sources and **the market price of the energy concerned**”. In achieving this approval, the Irish government at the time showed how the design; did not “over-compensate” recipients and provided the correct “incentive effects”. The 2017 State Aid approval for the capacity market commented (paragraph 166) that the aim of the State Aid is to ensure that the mechanism should leave the price and investment signals of the wholesale market intact. It goes on to say (paragraph 167) that where much value is remunerated **outside of the wholesale market**, “the electricity market loses its vital function of creating market-based investment signals”.

Recognising that the 2017 State Aid approval is separate to the 2010 State Aid approval, which relates specifically to REFIT, state aid principles are of universal application in European law. The two state aid approvals are thus both of relevance in that the 2010 approval centers on ensuring that the mechanism reflects the real market price for the energy to ensure that the mechanism does not over-compensate parties, while the 2017 approval puts a focus on ensuring that the market appropriately compensates parties to minimize out of market ‘top-ups’ that would undermine the market. If in redesigning the settlement mechanism for REFIT we do not achieve this balance between the market over or under compensating supported entities and minimize the levels of out of market compensation, we risk undermining state aid principles and both State Aid approvals.

1.2 BGE Perspective

As a supplier in the electricity market, Bord Gáis Energy (BGE) has two primary concerns as we move into the I-SEM:

- 1) without bidding rules across all markets, will parties be able to exercise market power in one or more of the markets and drive up prices for consumers; and
- 2) if this potential market power is exercised and coupled with increasing levels of wind and a corresponding reduction in the level of dispatchable generation, will there be liquidity in the forward market to enable suppliers to hedge wholesale price risk and to compete effectively in the retail market?

One of the mitigating factors for the above concerns is certainty around adequate levels of wind trading in the Day-Ahead Market (DAM). Given the increasing levels of wind in the market, its participation in the DAM will become a core element of ensuring liquidity and therefore mitigating

¹ The I-SEM will introduce a Day-Ahead, Intra-Day and Balancing Market to the all-island electricity market.

market power concerns in the wholesale market. It is therefore important that wind is incentivised to trade Day Ahead to maximise liquidity and support predictable price formation in that market, ultimately to the benefit of the end consumer.

It is universally understood that wind forecast errors exist day-ahead, no matter how sophisticated a unit's forecasting and/or trading capabilities are. Therefore, to assume all wind volumes receive the Day-Ahead market price relative to the price certainty offered by the REFIT reference price is unreasonable. To assume all wind volumes receive the Balancing Market price for all metered output would also be unreasonable as it would send a perverse trading signal to all supported units, undermining the Balancing Market design and undermining the State Aid approvals that Ireland has received. It would also be misaligned with the trajectory of European legislation towards balance responsibility for all technologies. The answer to the reference market(s) for REFIT in I-SEM must therefore lie somewhere in between.

With regard to the modelling conducted by EirGrid on behalf of Department of Communications, Climate Action and Environment (DCCAE), the relative trends² between the options provide interesting insights to help understand the trade-offs between objectives. In BGE's view, the most pertinent aspects of the EirGrid results are:

- It is clear that across all options, the overall costs to the consumer are reduced the more wind that trades in the Day-Ahead market, and
- Where **more than 80%** of wind is traded in the Day-Ahead market, there is no material difference between Option B and Option C in terms of total consumer costs

The choice between the options ultimately comes down to; (i) which option ensures parties are incentivized to trade in the Day-Ahead market, and (ii) who can best manage the unavoidable imbalance risk relating to variable wind generation, the generator or the PSO customer.

2. Assessment of the Options

Within the context set out above, BGE's assessment of the options presented in the Consultation Paper is as follows:

2.1 Option A: Day-Ahead Deemed Market Price

Whereby a 100% Day-Ahead reference price as provided under Option A would provide the maximum incentive to trade in the Day-Ahead market, given the universally accepted Day-Ahead forecast error relating to wind we believe that it would undermine the spirit of the REFIT support offered originally to investors.

The aim of REFIT was to give price certainty and to encourage investment in renewable generation to help Ireland achieve its ambitious renewable generation targets. Given that Ireland has equally ambitious targets out to 2030 (which will no doubt continue out to 2050), BGE does not believe that it would be in the Irish electricity customer's long-term interests to undermine this commitment. Reasonable regulatory certainty is critical in the delivery of investment, particularly long-term infrastructure investment. The Irish government has shown a commitment to regulatory certainty throughout Ireland's recent financial crisis and we must reaffirm this assurance as we

² It must be recognized that in modelling a market that is not yet operational, it is impossible to understand how accurate the modelling process is in matching actual market outturns. EirGrid's modelling therefore cannot be relied on in absolute terms.

move into another phase of development and investment over the coming decades to decarbonize Ireland's economy and society. BGE therefore agrees with the DCCAE and does not believe that Option A is a viable option.

2.2 Option B: Blended Deemed Market Price

On the face of it, Option B addresses many of BGE's concerns and considerations as a supplier in the market:

- It incentivises wind to invest in forecasting and trading capabilities to trade efficiently in the Day-Ahead market like all other generators, thereby contributing to Day-Ahead liquidity;
- It recognises the inherent existence of wind forecasting error and provides for that operational uncertainty through the blended pricing approach;
- It recognises the barriers for small independent generators in forecasting and trading by providing the 70/30 blend for all deminimus units;
- It supports the market design in incentivising wind to minimise volumes spilled into the balancing market, thereby ensuring that the balancing market provides the right price signals for fast acting demand and generation.

BGE understands that as Option B is using a blended price, it will not truly reflect the actual market revenues that parties receive from the market. Specifically, where generators forecast poorly and under-deliver in real time, they could under-recover when the Balancing price is higher than the Day-Ahead price. Whereby there will be trading periods when parties get this balance wrong and incur losses, on average, and assuming rational behavior, this risk is manageable with the correct forecasting and trading capabilities. In BGE's view, Option B therefore provides the right incentives to facilitate and compliment the market design of I-SEM.

2.3 Option C: Compensation for average balancing costs

BGE recognizes that Option C is trying to provide for the shortcomings of Option B identified above in recognizing participants **actual** balancing costs. Although it is in operation in other markets, we must recognize the structural differences with the Irish market. BGE is still concerned that Option C allows for behavioral incentives contrary to the ISEM market design and which may put large portfolio players at an advantage to smaller independent players in the market. We are also concerned that it is administratively complex, especially considering how deminimus wind is settled in the all-island market.

As we have seen from the EirGrid analysis, the cost to the PSO customer increases considerably the greater the volumes traded in the Balancing Market. Although 'Game Theory' would suggest that parties trying to 'beat the average' balancing cost will look to arbitrage between the markets, which should in turn reduce the average balancing costs, the market structure in I-SEM may not deliver this outcome. A large share of wind generation in the all-island market sits within portfolios alongside conventional generation and demand. These parties may have different trading incentives than an independent wind generator as they seek to arbitrage markets across a much wider portfolio, even potentially at the expense of wind. This could be just a conceptual concern. However, in redesigning the support scheme, which intends to provide certainty and stability to its recipients, we should avoid implementing options that are susceptible to manipulation and which may require changes at a future date to address unintended consequences and perverse market behavior.

Related to this, the ability to arbitrage between the market will likely put larger wind portfolio players at an advantage to smaller players. The way that Option C operates around **the average** balancing cost, the profits of one windfarm will be funded by the losses of another, likely smaller, units. Ultimately, this should incentivize all wind to trade more efficiently, as they can make significant losses if they are significantly below the average but it will be an added cost and relatively larger risk for smaller wind generators.

From an administrative point of view, BGE is unsure as to how the actual balancing costs will be calculated, especially considering the levels of deminimus wind generation in the market. As a supplier that holds a number of offtake agreements with deminimus generators we believe that it will be difficult to distinguish between the ex-ante traded volumes and the balancing traded volumes of these units, which are typically just netted off against demand. You could simply **assume** that all deminimus wind is spilled in to the Balancing market to work around this issue, but as outlined earlier, this undermines the Balancing market and the intent of the market design to incentivise all parties to be balancing responsible.

In short, BGE is concerned that under Option C significant volumes of wind **could** be traded in the Balancing Market, increasing costs to the PSO significantly and undermining the design of the market and the incentives for balancing responsibility. While BGE understands that the market dynamics may dampen this, without experience of how the I-SEM will function and how prices will outturn, BGE is concerned that Option C will expose the PSO customer to an unquantifiable risk at this stage.

Ancillary Points to Note

Related to the proposed changes outlined in the Consultation Paper, BGE asks that the DCCAE also consider **the process** that REFIT generators and their Power Purchase Agreement (PPA) counterparties must undertake over the coming months in advance of I-SEM Go-Live.

Specifically, BGE is currently talking to REFIT supported projects who are seeking to exit their current Supplier Lite arrangements and enter into PPAs with external suppliers to help better manage their administrative burdens and trading risks under ISEM. In order to facilitate this process, the DCCAE will need to facilitate changes to PPA counterparties **in advance** of ISEM go-live. While we recognize the provision within the Consultation Paper for changes in the PSO legislation for the 2018/19 year, this will not be sufficient to allow parties prepare for ISEM. We therefore ask that a process is established within the DCCAE to facilitate **approvals of changes in PPA counterparties as soon as possible**. This will be an urgent requirement to facilitate the changes being considered and proposed in this Consultation Paper. It would be helpful if this process could be outlined as part of the Final Decision expected in Q1 2018 and the resources necessary to accommodate the required PPA changes, assigned in tandem.

Lastly, as part of its Final Decision BGE also asks for clarification on two specific matters. Firstly, under Option B, if it proceeds, can you confirm that the “lower of” provision will be calculated on a trading period basis? Secondly, and given the recent consultation on future renewable supports, it would be useful to understand if the DCCAE expect the methodology decided on for existing REFIT supported projects to also apply to future support schemes?