ESB Group Response:

Integrated Single Electricity Market

(I-SEM)

Market Power Mitigation Discussion Paper

SEM-15-031

19th June 2015

Energy for generations

Contents

1. INTRODUCTION

ESB welcomes this Market Power Discussion Paper and the opportunity to respond to it. We are committed to engaging constructively with the Regulatory Authorities in this work stream and others to ensure, as far as possible, cost effective and competitive outcomes to I-SEM which operate in the interests of customers.

We particularly welcome the conclusion of the SEM Committee evidenced at 3.2.2 “that there has been no significant market power exercised in the physical spot market” of SEM. This is welcomed as it is of huge importance to all that the integrity of the sector is recognised so as to maintain the trust of customers. In this respect the market in Ireland contrasts sharply with the situation in GB in recent years where the trust of customers has been eroded in the market due to a number of factors including the behaviours of some participants.

We recognise that ESB has been the focus of the Market Power debate in SEM to date but equally it should be recognised that our behaviour has not only been exemplary, it has been pro actively focussed on ensuring positive market outcomes for customers and other participants. Examples to date include:

- Our willingness to offer long term PPA contracts under the Capacity 05 programme to secure the entry of new competing power plants;

- Our willingness to offer, without regulatory obligation, CfD contracts based on the nominal volumes of the PSO contracts, to all market participants as a liquidity measure;

- Our willingness to offer, without regulatory obligation, CfD contracts more frequently and with a higher degree of granularity at the request the Regulatory Authorities/market participants;

- We were instrumental in the establishment of the Tullet Prebon OTC contract platform;

- ESB has been the only party to consistently offer NDCs in SEM.

Equally, it should be recognised that the wholesale market has changed substantially since the SEM was introduced with further new entry of large and small scale generation and Interconnection. The market will evolve further over the period to 2017 when I-SEM goes live and to 2020 based on actions which can be clearly modelled at this point in time. Our modelling demonstrates that ESB’s market share by volume at 2017 will be below 40% and will be in the low 30s by 2020 (and significantly lower by capacity). On this point we would refer to competition / antitrust law which considers it unlikely for a company to hold a dominant position with a market share below 40% - or at the very least the presumption of dominance is no longer valid.

It is particularly instructive to note the number and type of new entrants to date in both Generation and Supply. The very fact that the generation market has attracted two of GB’s “Big 6” is hugely positive from a market development perspective and illustrates that this is an attractive market to enter. Both are substantial companies with interests in generation and retail, in Ireland and in Great Britain, in gas and electricity. Both also have strong trading competencies backed up by a presence in upstream gas production and an operational and financial scale which is a multiple of that of ESB. These factors must be taken into account when considering the competitive dynamics of I-SEM and ESB’s position within it – particularly given that the I-SEM raison d’etre is to drive market integration between Ireland and Great Britain and further into Europe. A forward looking evidence based analysis must be at the core of this discussion.

We note that the I-SEM design philosophy (as noted in Para 1.3.1) is for *"a competitive approach that is in the interests of customers",* and while we have raised concerns with this philosophy to date, we anticipate that should the SEMC stay true to this objective then given the changes to the market structure as outlined above, it should lead to a relaxation of the market power mitigation measures under I-SEM particularly those which are focussed solely on ESB.

Finally we reiterate our intent to engage constructively with the SEMC and others in this programme of work. The remainder of our response provides commentary and answers to the questions posed by the Discussion Paper.

2. CONCEPTS AND MEASUREMENTS

2.1 Market Power Definition

The SEMC consideration of market power in the discussion paper (Para 2.1.2) as the *capability* that a market participant holds to enhance profitability is insufficient.

By comparison, in what is one of the most comprehensive investigations into competition in the sector in recent years and with a significant backdrop of perceived market power practice, the UK's Competition and Markets Authority (CMA) has conducted analysis into the ability, incentive and effect of vertically integrated firms using their position in one market to harm competitors (foreclosure).[1]

A similarly rigorous approach should be adopted by the SEMC given the extent of the wholesale market changes that have taken place since SEM's inception as well as those under way in respect of the I-SEM, taking in to account incentive and effect and not only capability.

2.2 Forward v Spot Market Power

The Paper argues that the potential for exercising market power in the financial forwards market is less than the physical spot market (due to the lower barriers to entry and the scope for international trade) but then argues that it is still a possible concern. ESB does not believe that the ability or the incentive to exercise market power in the (financial) forwards market is of any concern. The fact that the financial forwards market can be extended to include proxy fuel hedges (which incorporates the highly liquid NBP gas market) ensures that market power in the forwards timeframe should not be a concern for regulators (the issue then becomes one of ensuring smaller participants have the ability to trade on the credit terms defined by larger counterparties).

The focus of market power mitigation if any should be against the spot market only (and an argument could be made to refer specifically to the balancing market only) and include all participants.

2.3 Market Definition and Geography

Examining the market power issue from both an all-island and a broader geographic perspective (Para 2.3.2) is welcomed. The physical interconnection between I-SEM and BETTA, the strong correlation between Irish electricity prices and NBP gas (that exists on both islands) as well as the presence of two of the GB Big 6 in I-SEM should lend itself to a definition of the market widening to include GB electricity and gas.

Notwithstanding the issue of limited physical interconnection, potentially restricting the extent to which the markets are joined, a sophisticated trading capability (as exists for larger participants) allows for basis risk between GB and I-SEM power prices to be readily managed through financial products, thus negating the impact that any physical limitation holds.

[1] https://www.gov.uk/cma-cases/energy-market-investigation#working-papers

Moreover, alternative hedging arrangement will become more accessible as evidence of the impact of the EUPHEMIA model on DAM prices and the correlation with other markets, notably GB power, increases. These instruments will use correlations between other markets (in addition to NBP gas) to provide hedging instruments to manage financial exposures to the SMP. These hedges should enable longer tenor hedges to be developed and could potentially favour increased competition.

At an EU level there has been some recognition that markets may be wider than a strict national level, particularly in the context of EU-wide harmonisation. With the introduction of I-SEM (and in particular, trading in EUPHEMIA and the exclusive nature of the day ahead and intraday markets) the market is now evolving towards an EU (or EEA) wide market and should now be considered at least to include GB and the island of Ireland.

Whilst the EU Commission has not yet accepted a broader market definition, it has indicated that it may be willing to do so when there were increased harmonisation measures. In its decision Comp/M.410 E.ON/Endesa, the Commission stated:

- "The Commission considers in general that in light of Council Directive 2003/54/EC the possible emergence of wider than national markets needs to be examined." (although it might be noted that in that case, the market investigation indicated there were still national markets in the relevant Member States – Spain, Italy, France Poland and Germany)

In the EU Commission's Guidance on Market Definition (97/C 372/03) it states that "the Commission also takes into account the continuing process of market integration, in particular in the Community when defining geographic markets, especially in the area of concentrations and structural joint ventures."…."A process of market integration that would, in the short term, lead to wider geographic markets may therefore be taken into consideration when defining the geographic market for the purposes of assessing concentrations and joint ventures."

Even if the SEM Committee is not minded to find that the market is wider than all-island, the impact of (i) the presence of large GB based VIUs in the I-SEM; (ii) the European and exclusive nature of the Day Ahead and Intraday Markets; and (iii) increased harmonisation measures in the internal market should all be taken into account in assessing competitive constraints and, ultimately, the ability, incentive and effect of a participant in the I-SEM to exercise market power.

2.4 Forward Contracts

As outlined in the Discussion Paper, Directed Contracts have had the dual benefit of providing liquidity to the market while also addressing the market power issue based on capability – thus providing a direct link between market power and liquidity. However, the objective of creating liquidity in forward contracting in I-SEM should not result in asymmetric interventions being unnecessarily imposed on one participant. Liquidity is a market wide issue and it is noticeable that to date primarily only ESB has been mandated to deliver the liquidity needs of the market – while larger players have access to options to trade/manage positions it is the smaller players that require sufficient liquidity to operate effectively.

While DCs achieve many of the principles for market power mitigation outlined in Section 3.3, e.g. of being effective and feasible, and are clearly a potential market power mitigation measure for I-SEM, they should not be considered necessary or the only tool by which market power and liquidity can be dealt with together. DCs do not lend themselves to competitive outcomes (distributed to supply companies based on market share with no risk premium) and arguably could also act as a deterrent to new generation entering the market should, for example, an existing player choose to rely on DCs rather than invest themselves.

2.5 Market Concentration Measurements for I-SEM

The choice of measure is an important matter in examining market power and deciding if regulatory intervention is required. The market concentration measures cited in the Discussion Paper are standard economic measures and clearly applicable to the exercise. However, the SEMC must recognise the limitations of these measures and not use them in an overly simplistic assessment of the issue. Market Concentration measurements should be one of several tools used in determining the ability of a participant to exercise market power. It should also be recognised that these measures do not indicate incentive or effect and are therefore limited in their use as indication of existence of market power.

It may be useful to refine some of the measures when conducting the assessment to take account of the practical realities of the wholesale generation market, some of which are discussed below.

- **Market Share:** Market shares are an appropriate starting point for assessing market power because they reflect the extent to which each company was/is (or will be if forecasts are used) actually able to satisfy demand in the relevant market during the relevant period of time. However, concentration and the number of competitors in a market do not always provide a good indication of the level of competition in that market. Markets with many players and low concentration can sometimes be cartelized, whilst highly concentrated markets can be characterized by fierce competition when, for instance, entry into and exit from the market are very easy. As noted in the introduction, competition / antitrust law which considers it unlikely for a company to hold a dominant position with a market share below 40%.

- **Generation Price Setting Capability:** The SSNIP (Small but significant non-transitory increase in price) being one measure in this space, provides only a crude assessment of the capability here, but fails to take account of the temporal nature of the market as discussed in previous sections. Therefore the analysis must be more selective than just looking at a simple SSNIP test.

  A consideration for regulators in this regard should be the level of competition and the ability/incentive to profitably withdraw plant for a prolonged period in the price setting section of the generation stack (for SEM/I-SEM this is predominantly the mid-merit CCGT section) as well as at step changes in the stack, for instance as referenced by the CMA where the fuel switches from coal to gas.

- **Residual Supply Index:** This may be a more suitable index, possibly adjusted to normalise for market share to measure the potential for market power in electricity markets as it concerns the ability to exert market power at times when it is of concern i.e. during peak conditions (but it can also be adjusted to look at other periods on the market).

  RSI analysis should be refined (or scenario tests conducted) to take account of interconnection, forecast wind and forward contract volumes (which although voluntary further reduces ESB's uncommitted capacity in the spot market).

- **Herfindahl Hirshman Index (HHI):** HHI is a crude measure of market concentration and does not address any of the complexities of wholesale electricity markets previously discussed. The SEMC has previously set a HHI of 1150 as a means to establish the volume of DCs that ESB (primarily) must offer to the market – on the basis that at this level of market concentration the SEMC believes that there is no/very limited market power. HHI is a widely used measure in many industries but may not be best suited to electricity markets as it can prove to be incapable of detecting market power as it focuses on market shares and not the indispensability of a generator to meeting load. Furthermore the measure fails to take account of the fact that the wholesale market HHI could go up based on the actions of a third party thus increasing the focus of regulatory market power intervention (on ESB) - an intervention imposed on one party due to the actions of another based on an arbitrary economic measure cannot be considered proportionate.

In assessing market concentration under any of the measures in the discussion paper it is imperative that the analysis is forward looking (i.e. does not simply use historical or snapshot data as a means of determining the outcome). The analysis should be conducted on the basis of projected outputs figures throughout the lifetime of the I-SEM and as a minimum should take place for the years 2018 and 2020.

2.6 Consultation Questions on Concepts and Measurements

Q1 Are the market power concepts and examples provided appropriate and sufficient for I-SEM?

Notwithstanding the above comments, Yes.

Q2 Are the potential constraints on market power referred to above appropriate for I-SEM?

Notwithstanding the above comments, Yes.

Q3 Given the emerging I-SEM design, including closer integration to European electricity markets and a number of energy trading timeframes, what is the appropriate geographic market(s) and/or trading period(s) definition for the measurement of market power and determination of a mitigation strategy in I-SEM?

A measurement of the ability or incentive of an individual seller or group of sellers to exercise market power is meaningful only by an appropriate identification of relevant markets. Considering the issue of market power using a narrow geographic definition over a single time horizon is insufficient and fails to take account of the complexity or the temporal nature of the wholesale energy market. Specifically the assessment of market power should take account of:

- The European and exclusive nature of the physical markets
- The wider geographic definition (discussed in Section 2.3)
- The distinct ex-ante market timeframes that will exist under I-SEM

Q4 Are the various (other) market design issues referred to above and their potential impacts on market power captured appropriately and fully?

Notwithstanding the above comments, Yes.

Q5 What is the appropriate approach to measuring market power when developing a mitigation strategy for I-SEM?

See Section 2.5

Q6 Should the measure be determined at a snapshot in time or based on historical or potential future trends in market share (or both or all three)?

See Section 2.5

3. MARKET POWER MITIGATION CONSIDERATIONS

Referring to Paragraph 3.1.1 of the Discussion Paper where it is stated "market power concerns that exist in the context of the SEM will remain in the I-SEM" is a presumption of dominance existing in I-SEM. This must first be tested and should be a core objective of the work stream before any presumption on the need for market power mitigation measures should be made. Any consideration of market power and market power mitigation must take account (given that the last test related to this occurred in 2010/11) of the many changes in the market since the implementation of SEM (as noted in Section 2) and the last market power and liquidity assessment. It should also consider the macro-level issues outlined in the introduction.

The following are specific comments in relation to existing and alternative measures that could be employed to mitigate market power in I-SEM. As noted above given the overall design philosophy of I-SEM of a preference for a competitive approach a relaxation in the level of market power mitigation required under I-SEM would be expected.

Existing Measures

- **Bidding Code of Practice:** The bidding code of practice (BCoP) has been practical and effective as a market power mitigation measure in SEM. However the feasibility of a strict BCoP under I-SEM is a concern (given that market participants will be responsible for incorporating start up costs into their bids). As such bidding principles under licence condition may be more applicable for I-SEM. For some form of bidding code to be effective under I-SEM however, the SEMC would need to clarify what behaviours they are seeking to incentivise.

- **Market Monitoring Unit:** The market monitoring unit should be continued into I-SEM as it is a useful tool in assessing the conduct and impact of market participants and has proven practical in SEM. The MMU must be equipped with a sufficient level of resources to ensure appropriate investigation of issues. While conducting its business under SEM, the MMU can rely on BCoP to monitor bids and assess conduct. Under I-SEM it will be important that the SEMC clearly define the behaviour which the MMU will be tasked with policing.

- **Directed Contracts:** The quantity of DCs is set to reduce HHI for the all island wholesale power market below a given threshold (1150). The threshold is set conservatively low so as to deliver, for all intents and purposes an un-concentrated market in SEM[2].

- **Vertical Ring Fencing:** It will come as no surprise to the SEMC that ESB wishes to have vertical ring-fencing removed under I-SEM. In the first instance we would question: if the DC HHI threshold, has been set to establish a level of competition that is considered relatively un-concentrated then what purpose (other than a liquidity provision) does continuing ring-fencing serve? Secondly the continuation of ring-fencing into a more dynamic competitively based market such as I-SEM, as ESB's market share falls to levels where dominance should no longer be a concern, denies ESB a key risk management tool that is the standard in the industry (faced with fixed energy tariffs against variable costs) and one which is available to much larger competitors that operate across borders between SEM and BETTA. Furthermore in the recent GB Energy Sector investigation into vertical integration, the CMA found that vertically integrated firms (in GB) do not have the ability to foreclose independent generators and that it was questionable as to whether there is an incentive to foreclose, or whether there would be any effect on end consumers in any event – we would argue that an assessment conducted along similar lines for I-SEM would have a similar outcome. Where liquidity concerns arise as a result of the removal of the vertical ring-fence, ESB is open to liquidity undertakings in line with, and proportional to, other participants of scale operating in the market and across markets.

[2] Where HHI is used in merger control, markets with an HHI below 1,000 are typically considered un-concentrated, while markets above 1,800 are regarded as concentrated. Markets with HHIs between those two thresholds are regarded as moderately concentrated.

- **EU Financial and Energy Regulations:** The existence of and effectiveness of other regulations adopted at an EU level should not be discounted by the SEMC. For example, the CMA in its investigation into the GB energy sector has found that *"capacity withholding could be considered a market abuse and therefore be punishable under REMIT. If detected penalties can be severe, meaning that gains from withholding would be more than offset."*[3]

  EMIR/MIFID/MAD as well as general competition law all act as additional constraints to generator behaviour. These regulations can have a powerful effect, given the related penalties on incentives to exploit market power. If withholding was obvious, it is likely to be observed by relevant authorities, and therefore the regulation is likely to constrain generator behaviour. If the withholding is less obvious, then the degree to which regulatory enforcement is a constraint might be questioned, albeit the profitability of smaller withholding may also be lower, leading to reduced incentives and concerns.

  Finally the volume of and contemporaneous nature (e.g. 1 hour outage notification) of data/reporting requirements under these regulations means that amount of data available to SEMC to investigate issues on a timely basis is considerably enhanced.

- **Licence Conditions:** The effect of Licence Conditions on behaviour is significant and should also be factored into the suite of market power mitigation measures at the command of the SEMC. On this point we would note the specific licence conditions unilaterally imposed on ESB with regard to its GB generation operations, while others with similar positions across both islands are not subject to.

Alternative Measures

- **Supplier Market Access:** Securing fair trading terms for independent suppliers will be an important requirement of the new market. Such an approach for should be considered for larger players to facilitate smaller participants in the market. Such a measure is easily implemented, practical and could facilitate competitive entry in the retail sector.

- **Market Making:** Market making combined with supplier market access rules could be a more competitive approach to ensuring both market power mitigation and liquidity are addressed in I-SEM. Any assessment of market making must address the potentially significant risks inherent within it, particularly related to the measure being applied to a small number of participants.

- **Local market power measures:** Given the nature of the I-SEM design and the small scale of the market, it is likely that local market power concerns will arise on a transitory basis from time to time. The GB Transmission Constraint Licence Condition would be a useful comparative to draw on in the context of the I-SEM

- **Other measures:** Consideration could be given to ensuring excessive profits are not earned through market power abuse (or by any other measures). Such a measure has the benefit of being applicable to all participants however consideration would have to be given to ensuring that accounting measures employed are fully transparent. Another potential measure for consideration could be the mandating of minimum volumes to trade in specific market timeframes.

3.1 Consultation Questions on Market Power Mitigation Considerations

Q7 How effective have the SEM market power mitigation strategy and measures been?

[3] Energy Market Investigation, Market power in generation, https://www.gov.uk/cma-cases/energy-market-investigation

As noted in Section 1 there has been no significant market power exercised in the physical spot market due to the relevant market power mitigation measures in place in SEM.

Q8 To what extent is the strategy and measures applicable to I-SEM?

The strategy and measures are applicable to the extent that they are in line with the I-SEM design philosophy of a preference for a competitive approach and so any measures adopted should not interfere with this philosophy, or do so to the minimum extent possible.

Q9 Are there other market power mitigation measures worth considering in the context of I-SEM? (See Appendix 2 for a review of a number of other European markets).

See above, Section 3

Q10 What are the barriers to entry for non-asset backed traders in the SEM financial forwards market?

As noted in our response to the Forwards and Liquidity Discussion Paper, the barriers to entry for non-asset backed traders in the SEM financial forwards market are primarily the scale of the market which does not lend itself to a significant volume of forward trade taking place to offer a sufficiently attractive opportunity. It should also be noted that many non-asset backed traders in the form of banks have exited the commodities market across the EU in recent years due mostly to stringent financial regulatory requirements.

4. PRINCIPLES FOR MARKET POWER MITIGATION

Before establishing principles that may under pin a market power mitigation strategy, the SEMC must firstly define the type of behaviour that they are trying to encourage, given the underlying philosophy for I-SEM as one aimed at fostering a competitive approach, including to facilitate competitive entry/exit.

ESB broadly agrees with the principles for market power mitigation within I-SEM, with the following comments/additions.

- **Targeted:** ESB has a clear preference for market power mitigation measures that are objectively applied in a non-discriminatory way to the entire market (therefore non-targeted or symmetric) or as a minimum those meeting certain criteria. We also agree that measures adopted should interfere with the market to the minimum extent possible and that they should be proportionate. Therefore we recommend that Targeted is replaced by two distinct principles of: Proportionality and minimally distortive of competitive market outcomes

- **Facilitate Competitive Entry and Exit:** The SEMC correctly note: *"The ability to increase prices temporarily above a competitive level is not a signal for the existence of market power. It is therefore sensible to allow participants that enjoy a particular segment of market power to enjoy a reasonable return from their market position in order to encourage competition to emerge and to signal the need for investment."* To this we would add that in order to facilitate competitive entry/exit, the price signal has to be correct and dynamic. It must allow the profit or loss impact to be experienced for a sustained period for effective competitive advantages to evolve. This requires time and excessive constraints against existing participants could hinder such an outcome.

- **Transparent:** The discussion paper includes the following under the heading of transparent: not overly complicated, easily understood, compliant and easily achievable. ESB does not agree that these are related to transparency and could be principles in their own right. A key issue for transparency is that the outcome and the way in which it is implemented are clear to everyone.

- **Sunset Ability:** Finally any market power mitigation strategy employed, in addition to being evidence based and proportionate, must be forward looking. In that respect ESB's modelling of the generation market in 2020 indicates that generation market share will be c. 30%. There are specific circumstances contributing to this outcome which ESB is happy to share with the SEMC but are withheld from this document for commercial reasons. Clearly, without prejudice to the SEMCs own analysis, should this circumstances arise as we expect that they will, then the rationale supporting the type of mitigation arrangements presently in place in the market, most noticeably, the DC and Vertical Separation arrangements which are exclusively applied to ESB, will fall away. We note and welcome the principle that mitigation measures should sunset as and when a specified outcome is reached. We ask the SEMC to note therefore the need to ensure that arrangements can be sun set in a cost effectively manner. While it will be straight forward to sun set DC arrangements, it will be less straightforward to sunset vertical separation arrangements if in the interim such arrangements require significant organisation, process and system requirements to compete in ISEM in the period from 2018 to 2020. We suggest therefore that preference should be given to those arrangements which lend themselves to a sunset clause and that this be one of the principles underpinning the mitigation strategy.

4.1 Consultation Questions on Market Power Mitigation Principles

Q11 Are the principles of market power mitigation outlined appropriate?

See above, Section 4

Q12 How should theses or other principles be applied in I-SEM?

Each market power mitigation measure/strategy should be assessed on the basis of a scorecard technique and without prejudice to any perceived hierarchy of principles. Such an assessment should be consulted on.

5. APPROACH

The two phase approach to this work stream, as outlined in the Discussion Paper, is to be welcomed as it will enable the detailed trading rules to more fully develop in line with the I-SEM HLD philosophy and unencumbered by regulatory interventions pertaining to market power.

As noted above ESB believes that the assessment of market power must take account of the European context of the I-SEM and as a minimum expand the analysis to incorporate not only I-SEM power and related financial products, but due to the presence of participants with operations in SEM and BETTA, the SEMC must consider the issue of proxy hedging in the GB gas market (either physical or financial).

In addition, and as also noted previously, the assessment of market power should not be restricted just to the ability of a firm to exercise market power, but should assess whether the incentive to do so actually exists and whether the effect of exercising market power will have a material negative impact on customers.

Any determination must be evidence based, forward looking and transparent. This must include evidence to demonstrate how failure has been identified (including the likelihood of its occurrence) as well as how remedies are assessed (likelihood of success and benefit versus cost, in the understanding that intervention could lead to lower economic welfare). On this point we would note that the CMA in their investigation indicated that they would seek to identify clear measures before intervening, on issues that are an enduring feature of the market (this takes into account time/contestability / changing technologies etc. and is not a measure at a single moment). The CMA believes that intervention should only take place if the market is likely to remain stuck in a poor equilibrium without external intervention (i.e. that market power will be abused to keep the problem real and sustained) – we believe such an approach would build on the I-SEM philosophy towards a more competitive approach. The emphasis in this regard is on the dynamic market and sustaining it - so that the market can 'self heal' and avoid unintended consequences resulting from interventions.

Finally, in setting and implementing a market power policy, the SEM Committee must in the first instance act within the scope of its powers, duties and objectives and must act reasonably. To this we would add that consideration should only be given to probabilistic and likely events with proportionate remedy, not resulting in double jeopardy where existing measures are in place effectively carrying out the same role.