Integrated Single Electricity Market (I-SEM)

Market Power Mitigation

Response to Discussion Paper (SEM-15-031)

Submission by EirGrid plc.

19th June 2015

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2 EXECUTIVE SUMMARY

EirGrid welcomes the opportunity to provide feedback on the RAs' Market Power Mitigation discussion paper.

Market power in the SEM is a concern today and therefore to promote confidence in the I-SEM and ultimately to protect consumers from market power abuse, mitigation in the form of appropriate regulation, commensurate with the degree of competition, is necessary.

Broader developments that help to reduce market power including greater demand response, reduced barriers to entry and greater forward market liquidity should continue to be actively promoted; however, issues of market power will remain a concern and specific measures that address these issues directly are essential for the success of I-SEM.

It will be important to ensure that any measures that are put in place are proportionate and do not unduly hinder the efficient operation of the market. In this regard, REMIT should form the basis of I-SEM market power mitigation. While additional measures may be required beyond REMIT, it would be important to understand to what extent REMIT addresses each of the considerations set out in the paper.

Market power measures need to have regard for the different scales at which market power can exist. These include: pervasive market power (i.e. market wide and persistent) but also for temporal and local market power. Local market power in particular can be particularly acute on a small island system like ours. A well-resourced market monitoring function is also important for the mitigation of market power.

Cases of potential market abuse from other markets can serve as important lessons as to the potential breadth and sophistication that market manipulation can take and an opportunity now exists to incorporate relevant learnings from these.

Finally, any market power mitigation measures that impact on TSO, NEMO or participant systems need to be identified early to allow sufficient time for implementation.

3 INTRODUCTION

3.1 EIRGRID PLC

EirGrid holds licences as independent electricity Transmission System Operator (TSO) and Market Operator (MO) in the wholesale trading system in Ireland, and is the owner of the System Operator Northern Ireland (SONI Ltd), the licensed TSO and MO in Northern Ireland. The Single Electricity Market Operator (SEMO) is part of the EirGrid Group, and operates the Single Electricity Market on the island of Ireland.

Both EirGrid, and its subsidiary SONI, have been certified by the European Commission as independent TSOs, and are licenced as the transmission system and market operators, for Ireland and Northern Ireland respectively. EirGrid also owns and operates the East West Interconnector, while SONI acts as Interconnector Administrator for both of the interconnectors that connect the island of Ireland and GB.

EirGrid and SONI, both as TSOs and MOs, have roles defined within the draft EU regulations that the I-SEM is required to comply with. We are committed to delivering high quality services to all customers, including generators, suppliers and consumers across the high voltage electricity system and via the efficient operation of the wholesale power market. This response is submitted on behalf of all of the EirGrid licensees.

4 KEY POINTS

- Market power exists to varying degrees across the electricity value chain in Ireland and Northern Ireland. To promote confidence in the market, and ultimately to protect consumers from market power abuse, mitigation in the form of appropriate regulation, commensurate with the degree of competition, is therefore necessary.
- Broader developments that help to reduce market power including greater demand response, reduced barriers to entry and greater forward market liquidity should continue to be actively promoted; however, issues of market power will remain a concern and specific measures that address these issues directly are essential for the success of I-SEM.
- It will be important to ensure that any measures that are put in place are proportionate and do not unduly hinder the efficient operation of the market. In the case of I-SEM, the efficiency of the arrangements relies on achieving the correct balance of incentives across the timeframes between forwards (including reliability options), day-ahead, intraday and balancing. Unlike the SEM, where all trading is focused around a single mandatory ex-post pool, the efficiency of the I-SEM relies on the correct signals emerging from each timeframe to promote the required response from participants in that timeframe. Any measures which dampen these signals or reduce participants' freedom to respond may impact on the efficiency of the arrangements. As such care is required when introducing measures to mitigate market power and the kind of measures that have been successful to date in the SEM may not translate easily to the I-SEM.
- Since the development of the current market power mitigation measures in 2007, laws to strengthen the transparency and integrity of energy markets have entered into force at a European level. REMIT, with direct application to Ireland and Northern Ireland, may address many issues of market power. As such, it would seem to make sense that REMIT serve as a starting point for market power mitigation in the I-SEM.
- The measures need to have regard for the different scales at which market power can exist. These include pervasive market power (i.e. market wide and persistent) but also for temporal and local market power. Local market power in particular can be particularly acute on a small island system with associated constraints.
- There are number of examples of market power investigations in electricity markets in recent years from around the world. These cases serve as important lessons as to the potential breadth and sophistication that market manipulation can take. The opportunity now exists to incorporate lessons learned from these cases insofar as they are relevant.

- The energy market value chain extends across multiple timeframes, jurisdictions and commodities. As the scope of the I-SEM market monitoring may be confined for reasons of governance and practicality, it is important that cooperation with upstream and downstream market power mitigation is established to ensure effective protection of the consumer. In particular, wholesale and retail gas and retail electricity would be important markets to consider. In addition, in keeping with the emphasis of the I-SEM on efficient cross zonal trading, cooperation with ACER and other relevant agencies in neighbouring markets and across Europe on market power mitigation policies should be also considered.
- Any market power mitigation measures that impact on TSO, NEMO or participant systems need to be identified early to allow sufficient time for implementation.
- Market Monitoring - a well-resourced market monitoring function is an important function for the mitigation of market power. When discussing market monitoring, market surveillance and enforcement, we understand the following broad definitions:
  - Market Surveillance – a process to identify and report market power issues in a particular market timeframe. This is a requirement of the relevant operator under Article 15 of REMIT.
  - Market Monitoring – a process to identify and report market power issues in across multiple market timeframes. Market monitoring is broader than market surveillance and is currently undertaken by the RAs at a domestic level and by ACER at a European level.
  - Enforcement – the application of measures and sanctions to mitigate market power. These can take the form of ex-ante and ex-post mitigations.

  For market monitoring to be effective in the I-SEM, clear roles and responsibilities with respect to surveillance, identification of suspicious activity, investigation and enforcement are required. In addition, timely access to all relevant data (from multiple sources), a strong analytical capability and expert staff with a deep understanding of both the market and the system are also important.

5 EIRGRID VIEWS ON THE DISCUSSION TOPICS

5.1 MARKET POWER CONCEPTS

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

We would suggest that the following additional points are considered:

Important that market power is mitigated

For the I-SEM, it is essential that the market power can be clearly identified and mitigated by the relevant authority in a timely manner to remove, or at least significantly limit, the potential for abuse of market power.

REMIT

While it is discussed later in the Market Power paper, we would consider that the starting point for market power mitigation should be REMIT. This European regulation, which is currently in force, defines phenomena such as market manipulation, attempts to manipulate markets and insider trading and then prohibits these activities. As such, we would suggest that REMIT forms the basis of I-SEM market power mitigation. While additional measures may be required beyond REMIT, it would be important to understand to what extent REMIT addresses each of the considerations set out in the discussion paper.

Temporal and local market power

Market power can manifest itself on a number of scales:

- Pervasive - market power that is present market wide at all times. This form of market power is the most serious but is generally more easily detected and mitigated.
- Temporal - market power that only exists for a number of trading periods. This form of market power can be difficult to identify due to it only being present for shorter periods of time.
- Local – market power that exists in a particular location that is constrained by system requirements. This form of market power is of particular concern to the TSO as it can exist for long periods of time depending on the underlying issues giving rise to the constraint.

Effective market power mitigation needs to consider not only pervasive market power but also temporal and local.

Market manipulation or legitimate trading strategy

It is important to note that in I-SEM, market participants will need to adopt trading strategies across the various market timeframes. Differentiating between what constitutes market manipulation in the form of withholding and/or price suppression and what is a legitimate trading strategy is not straightforward. In this regard, tests based on conduct-and-impact can be effective at drawing out this distinction. By way of example, where a participant appears to be withholding (conduct), it is only an issue if they are affecting the price (impact).

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

Competition among generation and suppliers alike

We agree that strong competition between existing participants and low barriers to entry for new participants should form the core mitigation of market power. We also agree that this does not apply only to the generation side and strong competition from suppliers is equally important.

Small players especially on the demand side

We would also like to highlight the importance of smaller participants in bringing new innovative ways of doing business to the electricity market. This can have a disproportionate effect on the efficiency of the market where there is diffusion of innovative behaviour across the market place (e.g. where one participant gains competitive advantage through innovation, it is not long before the remaining market participants adopt this innovative behaviour). So while small participants may not have a large impact on the average price of the market directly, their indirect impact can be significant.

In this regard, the cultivation of demand side response through DSUs or directly by end users is an important mitigation of market power. This will become even more relevant with the roll out of smart metering. Price responsive demand can significantly reduce the potential for market power. Any measures that restrict the ability of demand side players to enter and partake in the market need to be analysed closely.

Market power in forward timeframe needs attention.

A lack of forward liquidity with respect to energy is a serious issue for the SEM and potentially for the future I-SEM as it inhibits competition among suppliers. The lack of available hedging contracts acts as a barrier to entry for new suppliers and favours vertically integrated players. Where entry into a market requires a degree of vertical integration to manage risk, this can adversely affect the level of competition.

Forward liquidity with respect to energy

The directed contracts process is an important source of liquidity in this regard. Due to the lack of liquidity in the non-directed contracts arena, it is difficult to judge whether the risk premia on non-directed contracts reflect a competitive rate. As such, efforts should be made to encourage physical generators to offer forward hedging contracts to the market to ensure there is sufficient liquidity. As the paper notes, forward contracts are another important means of checking market power in the spot market.

Lessons from recent cases

The market power concepts and examples provided draw heavily on the concepts that helped define the SEM market power mitigation measures. While these measures have been broadly successful, it may be worth considering more recent developments in this area. Examples of market abuse in Europe and US can provide valuable lessons as to the scale and sophistication that market manipulation can take and specific examples are included in the response to Q3 in the next section.

5.2 I-SEM DESIGN AND MARKET POWER

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?

Market power exists at many scales

Market power can exist temporally at a trading period level (e.g. at peak demand) and locally right down to the nodal level (e.g. where a forced outage occurs on the line connecting a tail-fed generator). While pervasive market power that exists across a timeframe of years across the I-SEM is the most serious form of market power, it also tends to be the easiest to detect and mitigate. On the other hand, identifying market power that shifts temporally and locationally can be more challenging. Therefore, it is

important that the extent of market power at these scales is identified to determine the appropriate response (e.g. is it a one off occurrence or a situation that is likely to arise more frequently? Is it market wide or confined to a particular region?).

Market power is not confined to a single timeframe or location

Market power also exists across markets (i.e. within zone forwards, cross border forwards, capacity, day-ahead, intraday, and balancing) and any effective market power mitigation needs to understand the interrelationships between products across the various market timeframes[1]. Due consideration should be given to potential cross border effects arising from a participant's presence in both I-SEM and GB markets[2]. The entry into force of REMIT and the establishment of ACER are important developments since the establishment of the SEM that are relevant to any cross border issues. In addition how the demand for scarce, often locationally constrained, system services impacts the energy market would need to be considered also.

Transparency that promotes competition

While we are strong supporters of transparency in the trading arrangements, care needs to be taken to ensure that information is not available which might prove more useful in the hands of those who may attempt to exercise market power. There is a balance to be struck between information that increases the competitiveness of the market and information that can be used to undermine it[3].

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

Yes. Possible additional considerations include:

Increasingly dynamic trading

The more dynamic nature of I-SEM relative to SEM is an important consideration. SEM as an ex-post gross mandatory pool is a relatively static market and this lends itself to

[1] For example, see Barclays case with FERC: (http://www.ferc.gov/eventcalendar/Files/20130716170107-IN08-8-000.pdf)

[2] For example, see Electrabel decision: (http://www.twobirds.com/en/news/articles/2014/belgium/electrabel-decision-outlines-application-of-competition-rules-to-withholding)

[3] For example see Italian ancillary services case: (http://www.twobirds.com/en/news/articles/2012/italian-ancillary-services-cartel-highlights-risks-of-electricity-market-transparency)

the current suite of market power mitigation measures. In the I-SEM, the dynamic across the timeframes is new and is an important consideration for market power mitigation. Phenomena that do not exist today may present themselves in the I-SEM and the market power mitigation measures need to anticipate these phenomena accordingly[4].

As these market phenomena have existed for some time across Europe, they are largely catered for and prohibited under REMIT.

Interaction with support schemes

The interactions with other revenue mechanisms e.g. ReFIT in Ireland and the new FIT CfD arrangements under EMR in NI, need to be considered carefully.

5.3 POSSIBLE MARKET CONCENTRATION MEASUREMENTS FOR I-SEM

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

Integrated approach using both structural and conduct-and-impact tests

Different measures have different strengths and we would suggest that structural screening including the measures outlined in the paper (i.e. HHI, pivot supplier index, etc.) is combined with conduct-and-impact testing. Structural screens benefit from being relatively simple to calculate; however, in their simplicity they may not capture some of the more temporal or local market power considerations and they can lead to systematic over- or under-mitigation. Conduct-and-impact tests are more likely to pick up on temporal or local market power as they focus on behaviour; however, they require a competitive benchmark and can be more complex to undertake. Adopting an approach that utilizes both structural screens and conduct-and-impact testing provides information about the effectiveness of one approach relative to the other (e.g. where conduct-and-impact tests are persistently finding market power issues that are not identified by structural screens implies there is an issue with one of the approaches).

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)?

[4]Examples of market manipulation can be found here: https://en.wikipedia.org/wiki/Market_manipulation

Measures should be historical, real time or forward looking as required

It depends on the application of the measure. In the case of directed contracts, it is necessary to identify a projection of market power for the purposes of setting the level of directed contracts required. On the other hand, enforcement of the current bidding code of practice relies on historical behaviour.

Ex-ante vs. ex-post mitigation

Of relevance here is the timing of application of mitigation measures. Is the measure being applied ex-ante (e.g. in the case of directed contracts) or ex-post (in the case of market monitoring and enforcement of the BCoP). Where the application is ex-ante, by definition the assessment needs to be forward looking, whereas if the application is ex-post the assessment needs to be based on historical outcomes.

5.4 MARKET POWER EXPERIENCE

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

The market power mitigation strategy and measures have, in our view, been very successful in reducing opportunities for the exercise of market power. The success of these measures is due in many respects to the SEM design itself and how it established the necessary conditions for effective market power mitigation.

As a mandatory pool, liquidity is concentrated in a single transparent ex-post auction, which reduces barriers to entry for new generators and suppliers. The presence of a capacity payment and complex offer structures enables the application of a Bidding Code of Practice requiring generator units to reflect their short run marginal costs in their offers. The fact that commercial offers must reflect short run marginal costs greatly simplifies other market power mitigation measures such as market monitoring and the calculation of directed contracts prices.

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

In the case of I-SEM, the efficiency of the arrangements relies on achieving the correct balance of incentives across the timeframes between forwards (including reliability options), day-ahead, intraday and balancing. Unlike the SEM, where all trading is focused around a single mandatory ex-post pool, the efficiency of the I-SEM relies on the correct signals emerging from each timeframe to promote the required response from participants in that timeframe. Any measures which dampen these signals or

reduce participants' freedom to respond may impact on the efficiency of the arrangements. As such, care is required when introducing measures to mitigate market power and the kind of measures that have been successful to date in the SEM may not translate easily to the I-SEM.

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).

The TSOs will be required to begin its implementation program for systems required for the balancing mechanism in advance of decisions in relation to market power and in this light it is important that consideration is given to local market power issues that may need to be addressed in the balancing mechanism design as part of the ETA workstream. While it may be considered that some of the measures suggested may make up part of the final decision on market power, we believe it is important that these proposals are not excluded at this early stage.

Where a participant has local market power on a long-term basis, it may be a preferable solution for a generator in this situation to enter into a contract with the TSOs to either limit their market activity or to arrange for them not to act in the ex-ante markets. It is important that an option such as this is not ruled out at this stage before it is fully explored in the market power workstream.

A number of other solutions could mitigate these issues such as the application of a Bidding Code of Practice (BCoP) in the balancing mechanism; however, in the absence of certainty around what tools may be used to mitigate against local market power, a broad range of solutions, including bid replacement, out of market contracts, price / cost curves, etc., needs to be maintained as potentially making up the solution in the I-SEM.

Other options that merit consideration include codes of conduct similar to those used by power exchanges across Europe and the introduction of new generator licence conditions such as the Transmission Constraint Licence Condition (TCLC) introduced in GB.

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

Whether financial players enter the market in the forward timeframe remains to be seen. Electricity markets are complex physical arrangements and this can deter non-physical participants. In this regard, simpler and more transparent arrangements can

help to open up the market to new non-physical participants. A key metric of the general opacity / transparency of a set of arrangements are the number of variables and parameters that are necessary to relate a participant's trade to their actual payments and charges. The more layers of complexity that exist in a market the less inclined non-physical participants will be to trade in the market.

5.5 PRINCIPLES FOR MARKET POWER MITIGATION WITHIN I-SEM

Q11 Are the principles of market power mitigation outlined in this section appropriate?

Yes. Further principles could include:

Best practice – the mitigation strategy should draw on the wealth of experience that exists in this area around the world and adopt the lessons learned and best practice recommendations from other markets.

Innovative - In addition to allowing for innovation (which is very important), the measures themselves should seek to have an innovative approach. Many of the measures for the SEM were innovative solutions to the specific requirements of the SEM, e.g. the degree of transparency, the principles-based (rather than rules-based BCoP), the directed contracts modelling process.

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

The principles outlined in the paper should be used to inform the development of the market power mitigation strategy and in the on-going implementation of the strategy by the relevant actors. The effectiveness of the market power mitigation measures should be the subject of regular reviews to ensure that these principles continue to be satisfied.