Power NI Energy Limited
Power Procurement Business (PPB)

I-SEM Detailed Design

Market Power Mitigation Consultation Paper

SEM-15-094

Response by Power NI Energy (PPB)

18 January 2016.
**Introduction**

PPB welcomes the Regulatory Authorities engagement with market participants in the development of the I-SEM and particularly welcomes the Consultation Paper in relation to Market Power Mitigation in the I-SEM.

As we have commented in our previous responses, Market Power has been a significant issue and challenge in the SEM, notwithstanding the strongly regulated nature of the market. The opportunities for the exploitation of market power will be greatly increased in the I-SEM given the increase in market areas (e.g. 3 energy markets instead of 1) and the move towards market arrangements rather than regulated arrangements for the CRM and Ancillary Service markets. In addition, forward market liquidity is likely to be even more critical to participants’ risk management strategies and market power in such financial markets will also need to be addressed.

PPB’s response to the consultation on the HLD of the I-SEM\(^1\) and in particular the Baringa attachment that was included with the response\(^2\) (that considered how to promote forward liquidity and mitigate market power in the I-SEM), highlighted our concerns on the issues of forward market liquidity and market power.

**General Comments**

We provide detailed responses to the questions posed in the consultation paper in the next section of this response. However we summarise our high levels conclusions in this section.

**Forward Market is not being adequately addressed**

We do not agree with the position concluded in the consultation paper that there is lessor market power concerns in the forward market and that these can be adequately monitored through recently introduced financial market monitoring mechanisms such as EMIR and REMIT. This is contrary to the evidence that ESB is currently the dominant seller of forward contracts and will continue to be so in the I-SEM. Customers and hence Suppliers require forward market contracts to hedge what would otherwise be volatile prices. We note that there is a Forward Markets and Liquidity workstream but the indication is that it is looking solely at liquidity and not market power. It is therefore surprising that the current consultation paper is ignoring the evidence of dominance and the risk this creates to both pricing and

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1. SEM-14-008
2. Titled "Promoting forward liquidity and mitigating market power in the I-SEM"
withholding in the forward market. The new financial reporting requirements focus on price but will not be capable of identifying whether capacity has been withheld which is one of the more critical concerns that impacts not only liquidity but also price premiums where scarcity of contracts is a consequence. The potential for abuse of market power and possible mitigation measures must be considered in tandem with the Forward Markets and Liquidity workstream to ensure a liquid and competitive forward market is established.

**Prescriptive rules equate to regulated prices**

The consultation paper has a strong leaning towards prescriptive bidding rules which we do not believe is consistent with a competitive market and will result in regulated prices rather than competitive prices which is likely to be detrimental for customers. We also have major concerns that such a bias risks disturbing and distorting the normal market dynamics that should be expected across the markets. This could distort the normal coherency that should emerge across the market timeframes by influencing how and where participants trade with significant scope for unintended consequences.

This approach arises from the strategy identified in paragraph 8.3.5 that has the primary objective of minimising “Type 2” errors but this bias, allied to a market wide approach to mitigation (prescriptive SRMC) substantially increases the risk of “Type 1” errors by stifling competitive behaviour. The analysis shows ESB will remain dominant in the I-SEM and an approach that facilitates competitive behaviours while specifically developing measures to target ESB’s market power will provide the most effective outcome for customers.

We are also concerned that the inflexibility of such an approach will distort competition and creates a high risk of generators being required to operate at a loss which we consider would be illegal and creates a high risk of disorderly exit. Given the constrained nature of the Irish market, this could result is a risk to operational security and overall security of supply.

Our other major concern is that it raises questions over the wider I-SEM market design which requires State Aid clearance of the CRM. The EU favours energy only markets with competitive pricing and low levels of regulatory interference. Imposing prescriptive pricing will increase the revenues required in the CRM which may make State Aid clearance more difficult to obtain and creates risks to the sustainability of the overall I-SEM design.
**Principles option the only viable approach for the energy markets**

The I-SEM markets create much more risk for market participants who must make judgements on their likely running regime as they seek to construct bids for submission into the markets. This will be a particular problem for mid-merit capacity as wind penetration increases and running becomes increasingly dependent on wind output. In this context, generators will need to take account of many uncertainties as they try to forecast what their likely running regime might be to enable them to decide how best to reflect their costs into their bids. In addition, their competitors will face similar uncertainty and their decisions will also affect all the other participants in the market. Hence in such an environment, there are no prescriptive formulae to describe SRMC as it will vary depending on the forecasts and assumptions made. There is also significant scheduling risk in the DAM and there is no assurance of liquidity in the IDM to assist with managing the risk.

The consequence is that generators will require greater flexibility than exists in the SEM to enable them to manage the additional uncertainty and risk they will be exposed to in the I-SEM. As a result, anything other than a “principles” approach would be unworkable in any of the energy markets.
Responses to the Specific Questions raised in the Consultation Paper

Section 2

Q1 Do you agree with the policy developments and trends identified (above) as potentially impacting on an I-SEM market power mitigation strategy?

We agree with the summary of the policy developments and trends that have occurred since the commencement of the SEM but we do not consider these have had a material impact on the dominance of ESB in the wholesale and retail markets, nor have they reduced the market power potential that will exist in the I-SEM. This is clearly evident from the analysis summarised in Section 6 of the consultation paper.

Q2 Are there other factors not identified here which you consider relevant?

The primary additional factor that must be considered in relation to market power is the design of the I-SEM which creates multiple wholesale energy markets. The I-SEM energy markets will also be influenced to a significantly greater extent by the trading strategies adopted by Suppliers and Demand Side Bidders, with the scope for further impact on the market dynamics through the participation of assetless traders.

The new DS3 market is proposed to be much more dynamic with the potential for auctions for services. Further, the proposal that payments will be based upon delivery of services also results in a strong inter-relationship with the energy markets and hence DS3 introduces a further market that is exposed to market power.
Section 3

Q3 Do you agree with the proposed appropriate markets/trading periods for assessing market power in I-SEM's energy and financial markets?

We largely agree with the proposed appropriate markets and trading periods although we consider the following needs careful consideration.

We consider the Forward Energy Market is a separate market and do not consider the I-SEM capacity market should have any association with the forward energy market. Both markets are individually exposed to exploitation of market power, e.g. through withholding in the FM and by bidding behaviour in the CRM Auctions and hence will require different mitigation measures. Note we also disagree with the statement that the products in the forward market are limited to baseload, mid-merit and peaking products as there is no impediment to different products being traded and with market coupling there will likely be some alignment with the forward products traded in GB.

We generally agree on the scope of the DAM and IDM markets although the interaction of DS3 revenues with energy revenues will provide greater scope for dominant generators with a portfolio of generation and who are providing a wide range of DS3 services, to exploit such a portfolio to the disadvantage of smaller participants. This will need to be considered in relation to ESB’s portfolio.

In relation to the BM market, we consider there is a sufficient difference between the Energy and Non-Energy elements of the market that may merit these being treated as two separate markets. The analysis shows ESB will remain generally dominant in the generation market but ESB also controls a significant proportion of the flexible plant such as pumped storage that can respond within the Energy Balancing market timescales (i.e. within 1 hour) and hence may have a more dominant position in this sector of the Balancing Market.
Q4  Do you agree with the proposed geographic scope of the proposed markets/trading periods?

We agree the largest geographic scope is Ireland plus the interconnectors and that price coupling does not enlarge the markets over that which exists today. The consultation paper also appears to overly emphasise locational market power when the biggest issue is market power in the wider markets. Many of the localised transmission constraints may be very short term and transient, e.g. due to a forced outage which means the options available to the TSOs are limited in the short term and hence would be very difficult to forecast or assess by the use of modelling.

Section 4

Q5  Do you agree with the proposed definition of competitive behaviour and pricing in I-SEM?

We agree in principle that it would be rational to expect competitive pricing to maximise profits. The difficulty is how short run marginal costs (SRMC) are defined and determined. A key issue is that in the I-SEM with markets spanning different timeframes, with significant scheduling risk and with new uncertainties around the participation of demand and other generators, participants will be required to make commercial judgements as to how to reflect such risk in bid structures that do not reflect their underlying cost structures. Similarly the breakdown of longer term avoidable costs for inclusion in bids requires many assumptions and subjective judgements to be made. As a consequence SRMC cannot be identified in a prescriptive and formulaic manner as the context and information available to a participant at any point in time will inform their judgement as to how best to derive their bids to give the best approximation of SRMC that they can determine at that instant. This uncertainty means there will be a wide range of possible outcomes and hence SRMC cannot be precise as the differences between actual outcomes and the forecasts and assumptions used to derive bids will inevitably be different and hence SRMC bidding would likely be very different with the benefit of perfect hindsight (e.g. duration on load, load levels, ramp rates, etc.). In terms of the SEMC’s key principles for the assessment of market power mitigation options, prescriptive determinations of SRMC are neither practical nor targeted and could be detrimental to competition in the markets.
Q6  Do you think that the suggested examples in which market power can be exercised in I-SEM captures the relevant issues?

We consider the suggested examples capture most of the issues. They do however fail to recognise that demand will have a more pro-active role in the I-SEM and hence will have opportunities to influence price in the various markets either though the volumes that participate (e.g. in the DAM) or through active demand side bids (including in the BM). There is also an issue that scarcity pricing operates at a macro level, yet it is also feasible that scarcity pricing could be valid at a particular location reflecting the true value of generation at that location. In the absence of such additional value, there could be an even greater cost to customers if the generator is unable to cover its costs and seeks to close when it remains vital to the system and maintaining generation and operational security for customers. The alternative would be some form of out of market arrangement but there has been no discussion on this issue and there are risks of reliance on such an approach (e.g. how does that interact with the CRM and are there state aid considerations.

Q7  Do you agree that the potential for market power abuse in I-SEM appears to be weaker in the forward financial market compared to the physical markets?

We do not agree that the potential for market power abuse in the forward market is weaker. The forward market is the most critical for retailers and customers since that is how they secure long term price stability and hence any abuse in the forward market will have a leveraged effect. We also question the proposition that competitive physical markets limit the exercise of market power in the forward market. While that has some effect on the value of a forward contract at the time of consideration, not entering a forward contract still leaves exposure to wider price volatility arising from volatile commodity markets and even seeking to mitigate this with proxy hedges of commodities will leave a residual exposure for the retailer or the customer. It is therefore unrealistic to say that Suppliers have the choice not to purchase forward contracts on an ongoing basis and such exposure will have wider implications for the sustainability and effectiveness of competition in the retail market.

The concept of lower barriers to entry to the forward market is largely theoretical and the evidence in the SEM has been that only physical participants trade in the forward market. There has also been significant
withdrawal of financial counter-parties from the financial commodities markets in GB and given these markets are much more liquid than the SEM and most likely the I-SEM, it would be imprudent to rely on the theoretical entry by assetless traders.

Finally we do not consider that EMIR and MiFiD are helpful in mitigating market power since they merely consider the transactions concluded whereas the most likely form of market power abuse in the forward market is withholding capacity on which EMIR and MiFiD will not provide any material assistance.

**Q8 Do you agree with the implications for market power arising from interactions between the physical markets, CRM, FTRs and DS3 System Services as shown above?**

We agree there are very significant interactions across the markets which create many more opportunities for dominant participants to skew and distort the markets. The complex relationships across the forward and energy markets and the interplay with the CRM, FTR and DS3 markets will make it much harder to identify abusive actions which may be subtle when considered in isolation but which has much greater compound effects on the market dynamics. It is therefore critical that market power is considered at a macro level and that all aspects and markets are considered together.
Section 5

Q9 Do you agree that these are the appropriate metrics to identify market power ex-ante and ex-post in I-SEM?

We welcome the proposals to utilise a wide range of metrics to assess market power potential. The assessment will be made more difficult given the increase in the number of markets and the more volatile nature of residual demand as a consequence of increasing intermittent generation which means that price setting in periods of low wind may be the more critical periods in which market power could be exercised. It is important that the use of the metrics is not determined and set but that their use can vary dynamically as the markets evolve and the appropriateness and usefulness of the metrics similarly change over time.

Q10 Are there other metrics that you consider should be applied?

We consider the range of metrics identified should be suitable and the key consideration is how and when they are used and the context within which they are applied.

Section 6

Q11 Do you agree with the approach taken by the RAs to modelling market power in I-SEM?

We consider the approach to modelling adopted by the RAs to be generally reasonable although the impact of some of the assumptions such as in relation to adoption of the high demand forecast for 2019 and 2014 and excluding wind capacity from the capacity market shares, is unclear.

A further issue that is not considered is market power in the retail market. Suppliers will be much more active participants in the I-SEM energy markets in contrast to their relatively passive activities in the SEM. Therefore their participation strategies will be a new dynamic in the markets and the trading strategies adopted by Electric Ireland, given their 40% retail market share, are likely to have a significant influence on the markets and dynamics across the market timelines. This means that in the I-SEM, ESB will have dominance on both sides of the wholesale markets and this requires further consideration.
Q12 Do you agree with the conclusions for I-SEM market power that have been drawn from the modelling results?

The key conclusion is that ESB will remain the dominant participant in the I-SEM for the foreseeable future as evidenced by the HHI and particularly the RSI results. Also as noted above, ESB is dominant in the retail market and the impact of this on market power also requires consideration.

Section 7

Q13 Do you agree with the SEM Committee’s view on the effectiveness of each of the SEM market power mitigation measures?

We largely agree with the SEMC’s view on the effectiveness of market power mitigation measures in the SEM. The one area we would query is the DC measure where the more critical issue is not the volume of DC products offered but the overall aggregate quantity of CfDs offered by the dominant generators and whether there is any withholding of forward contracts.

Q14 Are there any particular aspects of the SEM market power mitigation strategy that you think should be applied differently, especially in relation to I-SEM?

As noted in response to the previous question, the key issue is to ensure the overall volume of forward contracts is sufficient and that there is no withholding from the forward market.

The other primary issue will be how market monitoring will function across energy markets. These markets operate very differently and pricing structures are not consistent. Given the new commercial risks participants will be exposed to in the energy markets, participants will require greater flexibility to structure their bids to enable them to manage these risks and the assessment of how to reflect these risks in their bids will inevitably vary depending on the information available, the assumptions and the forecasts that a participant uses in the construction of the bids. Hence there will be a wide range of possible outcomes and it will be virtually impossible for the MM to assess bids in the same way as it does in the SEM.
Section 8

Q15 Do you agree with the five key principles for assessing market power mitigation policies as outlined in this section 8.3? If you think there should be alternatives, please state the reasoning.

We generally agree with the five key principles and concur that they are likely to conflict in certain circumstances.

We consider that there should be two additional principles used to assess potential policies. The first additional principle is to minimise the impact on the wider wholesale market operation and dynamics such that it does not distort participants’ trading behaviours from what would normally be expected in wholesale electricity markets (e.g. not creating an incentive for suppliers to only trade in the BM). The second additional principle is that the arrangements should be cost proportionate such that they do not impose unnecessary cost burdens on market participants as they seek to comply with any of the measures that apply to them. Such measures could of themselves act as a barrier to entry which would ultimately disadvantage customers.

Q16 For the Forward Contracting Obligation:

- What should be the measure and threshold that results in a market participant being included or excluded in the FCO, i.e. what is its applicability?
- What should be the volume and product definition of forward contracting required from a market participant who falls under the FCO?
- How should the price be set for the volume contracted under the FCO?
- What type of access should buyers have to FCO volumes?

The purpose of the FCO is not absolutely clear. It appears to target removing any incentive to exploit market power in the physical markets rather than explicitly addressing market power in the forward market. We do not agree with the SEMC view that there is no market power issue in the forwards market.

In relation to any FCO, we consider that it should be universal, triggered once any participant exceeds a pre-determined threshold. We do not believe it is possible to define the volume and product at this stage but instead consider options for a methodology to determine these components should be assessed and consulted upon separately as part of the implementation phase. Similarly pricing and buyer access needs careful further consideration once
the objective is clear and the overall package of Forward Market Liquidity and Market Power mitigation measures are determined.

We are concerned at the separation of the Market Power and Forward Market Liquidity workstreams and are particularly concerned that each workstream is seeking to leave the issues for the other workstream to address with the result that the matter of market power and forward market liquidity is not properly addressed in either workstream. There must be clear co-ordination and cooperation across both workstreams to ensure all the issues are identified and addressed.

Q17 Which of the balancing market mitigation options do you consider most appropriate, i.e. MMU-triggered intervention, automated intervention via a PST or via the “flagging and tagging” approach, or prescriptive bidding controls? Where feasible please relate the preferred approach the five key principles for this workstream of effective, targeted, flexible, practical and transparent.

We believe all of the proposed options are inappropriate. All the options fail the “targeted” test and all the measures interfere with the BM more than the “minimum extent necessary”. Many of the negatives for prescriptive bidding controls that are identified for such measures in the DAM/IDM apply equally in the BM and hence highlight the deficiencies of such an approach.

The options are also very impractical and the complexity will result in reduced market transparency. We agree that rational competitive behaviour would result in bidding to maximise profit, the determination of SRMC in the I-SEM will be much more complex than in the SEM and will, for example, require participants to make assumptions about running levels and duration as they derive INC and DEC bids for submission into the BM. Hence there are many possible options that represent legitimate forward looking SRMC bids all of which are dependent on forecasts and assumptions.

Such subjectivity could not be captured by prescriptive rules and there is a high risk that under each of the options, where bids are substituted, generators could be operating at a loss which is not a viable or sustainable outcome since if that results in revenue adequacy issues for generators that are required then that could create significant risks to security of supply. Further, given demand is a more active participant in the I-SEM, equality of treatment would require that similar bidding obligations would apply to demand side INCs and DECs. However, it is not clear how prescriptive rules and formulae could be derived for such participants.
A wider issue is that adopting a formulaic approach effectively results in regulated bidding which is even more prescriptive than exists in the current SEM and which conflicts with the intent of the I-SEM which is supposed to be more market based. However, imposing formulaic prices could have unintended consequences that causes market distortion and could impact on the overall competitive dynamics of the market by influencing where participants trade.

The Balancing Code has yet to be finalised but the objective is to couple balancing markets in a similar manner to the coupling of the day ahead markets. Imposing formulaic SRMC bids in the I-SEM could distort future cross border balancing trades which could result in inefficient trading. This could also be an issue in the DAM if trading strategies are skewed resulting in inefficient DAM coupling which would be contradictory to the objectives of CACM.

A further concern is that any formulaic approach that causes any revenues shortfalls in the BM would be expected to result in higher prices in the CRM as generators seek to recover any loss. The net impact on overall costs for consumers is therefore unclear. This outcome could also have negative consequences for the State Aid clearance of the CRM given the current EU favour for Energy Only markets.

We consider the only viable option is a “principles” based approach which identifies the principle that bids should reflect SRMC but provides flexibility for participants as to the interpretation and subsequent construction of bids. This approach would be similar to the current SEM approach although greater flexibility may be required given it will likely be more difficult to fully reflect underlying cost structures which means participants have greater uncertainties and higher risks to manage and reflect in their bids. We are surprised this was not provided as an option for the BM yet it is proposed as an option for the DAM/IDM.
Q18 Which ex-ante bidding/offer market power mitigation options for the DA and ID markets do you favour – bidding principles and ex-post assessment, or ex-post assessment only? Where feasible please relate the preferred approach to the five key principles for this workstream of effective, targeted, flexible, practical and transparent.

We agree that prescriptive bidding controls are not appropriate for the DAM/IDM and as outlined in response to the previous question, they are similarly inappropriate for the BM for many of the reasons identified by the SEMC in relation to the DAM/IDM.

In line with our views on the BM, there is a requirement for flexibility in the determination of SRMC and this may be relatively dynamic as participants seek to manage their risks (e.g. Euphemia scheduling risk) and the strategies adopted by other participants in the markets. There is also the issue of equality of treatment for participants in the markets and, for example, it isn’t clear how SRMC would be interpreted for assetless traders who could be acting in any given trading period as a buyer, seller (or both) and there are similar difficulties in relation to demand participants.

We therefore consider that the only feasible option is for ex-post enforcement whereby the MMU can assess bids and where it identifies concerns with bids, it can seek information on the bid formulation to seek assurance that the bid is not a manifestation of market power. This is a much more focused approach and is likely to be the least distortive to the wider market dynamics and should result in the most efficient cross-border coupling as all trading parties would be operating on a common basis.

Q19 If ex-ante bidding principles were to be adopted, how flexible should they be and how would this be facilitated/enshrined in their wording?

In ex-ante bidding principles were to be adopted they would need to be very flexible such that participants are able to take account of all the risks and uncertainties they will face in the I-SEM given that; for example, participation is voluntary and hence the supply/demand balance will be unpredictable. Similarly, Euphemia seems likely to create scheduling risk given the trials to date indicate a number of the bid types are problematic and that participants seem unlikely to be able to replicate their underlying cost structure in bids and will therefore need to forecast running regimes, etc over which to smear start and no load costs and which will inevitably turn out to have been wrong.
It is also unclear how bidding principles could be applied equally to all participants who have the potential to determine the clearing price since only applying the principles to I-SEM generators but ignoring Demand bids, bids from assetless traders and bids in the interconnected markets would skew and distort the market. This would not be an effective outcome.

**Q20 Under what structural conditions or in combination with other market power mitigation measures should vertical ring-fencing of the incumbents be relaxed?**

It is clear from the analysis in the consultation paper that ESB remains dominant in both generation and supply and hence vertical ring-fencing remains appropriate for ESB because of this dominance and not because of incumbency. The aggregate generation market share of Viridian businesses places it outside the top five in the I-SEM (and substantially lower than SSE and BGE), while the aggregate retail market share broadly equals that of SSE. Hence there is no justification for Viridian to be treated any different to SSE or BGE merely because it was historically an incumbent. Any restriction should be based on tangible metrics that apply equal obligations on all participants in the I-SEM, although clearly on the basis of the analysis shown in the consultation paper, ring-fencing would need to remain for ESB for the foreseeable future.

**Q21 Under what circumstances and criteria (or metrics) should the application of ring-fencing to other market participants be considered?**

As outlined in response to the previous question, we consider any ring-fencing obligations should be based on metrics that apply equally to all market participants and the key decision is at what level the hurdle should be set.