



Energy for
generations

Generation & Wholesale Markets

Comments on:

I-SEM Energy Trading Arrangements Detailed Design

Building Blocks

November 26th 2014

Introduction

ESB Generation and Wholesale Markets (GWM) welcomes the opportunity to submit early feedback on the “Building Blocks” section of the Energy Trading Arrangements (ETA) for the I-SEM. However, since discussion to date has been on individual discrete topics, there remain many open questions on how all aspects will interact. Without this full picture ESB GWM would like to caveat the comments below as provisional views only. Nevertheless we hope our response is useful and we look forward to responding on the official consultations in 2015.

Comments on each of the three Workshops and Discussion Papers are given in sections one to three below, and further comments on the process of engagement with industry are outlined in section four.

1. Discussion Paper and Workshop 1.1

1.1 Firm Access

Firm Access / Unconstrained Market

- While Discussion Paper 1.1 (DP1.1) focuses on the treatment of generation with Non-Firm Access in the I-SEM, ESB GWM understand that it is the SEM Committee’s (SEMC) intention to transpose the current SEM policy on Firm Access into the I-SEM design. ESB GWM support the continuation of policy in relation to Firm Access in the I-SEM. It is important that the principle of an unconstrained market, whereby generators with Firm Access are held firm financially if they are constrained by the network, is maintained in the I-SEM. Consideration also needs to be given as to which revenue streams firm financial access covers. Generators should also be held financially firm for any foregone System Services revenues as a result of system constraints.
- The mechanism by which the cost of constraints is recovered from suppliers also needs to be considered to ensure that there are no large fluctuations in year on year tariffs that must be recovered from customers.

Non-Firm Access

- One option presented in DP1.1 is excluding generation with Non-Firm Access from participating in any other time frame other than the Balancing Market (BM). It is not clear how much of the generation in the market is Non-Firm, or what this figure will be in 2017 and afterwards. If the level of Non-Firm generation is high, then a rule barring participation in the ex-ante markets may have the result of reducing liquidity in these timeframes, which is contrary to what the SEMC is trying to achieve in the High Level Design (HLD). ESB GWM would caution against any such blanket ban in the absence of analysis of the impact this would have on liquidity and efficiency of the ex-ante markets.
- Another option in DP1.1 involves advance notification by the TSOs of what level of the Non-Firm Access the system will be able to accommodate. ESB GWM consider that there may be a requirement for an active role by the TSO in this regard. If the ex-ante

markets, in particular the Day Ahead Market (DAM) is to be the liquid reference market, then it is important that any Non-Firm generation, that will in reality be able to be accommodated by the system, can participate in this timeframe. The TSO capability to prior notify system capability should be investigated and maximised.

- Further options in DP1.1 explore what price Non-Firm volumes would be settled at in the BM if these volumes were to be traded ex-ante but subsequently had to be constrained down as the system could not accommodate them. ESB GWM consider that a possibility that could be investigated is linking this to TSO notifications or commitments as outlined in the previous paragraph. So for example, if the TSO gave notification that the generator output could be accommodated, then this volume would essentially be treated as Firm.
- One solution presented is that non-firm volumes that are traded ex-ante but cannot be accommodated on the system, could be bought back at the Imbalance Price. While this method has the advantage of being more straightforward than trying to calculate a buy-back price based on actual trades, it could expose Non-Firm generation to high levels of risk. A Non-Firm generator may end up worse off had they not traded ex-ante, and therefore would be discouraged from participating in the ex-ante markets. This would be contrary to the aim of the SEMC's HLD.

1.2 Transmission System Losses

- The proposal outlined in DP1.1 is to translate the current policy of locational Transmission Loss Adjustment Factors (TLAF) into the I-SEM. The examples given to demonstrate how this would be done appear numerically accurate. However ESB GWM consider that the existing policy is flawed and translating it into the I-SEM creates unnecessary complexity for participants and settlement processes, while adding no value in terms of incentivising demand and generation to locate in certain areas on the network.
- Actual out-turn TLAFs can vary significantly due to many factors not least the volume of wind on the system (which is only set to increase in the coming years). The current TLAFs are set ex-ante year ahead and therefore can bear little resemblance to the actual losses that occurred in each location on the system. In the I-SEM it seems that it would be Suppliers that would be left picking up the tab for the difference between the ex-ante and actual TLAFs as it would filter into their imbalance position. Suppliers would have no ability to forecast and mitigate against this risk. It is therefore more appropriate that this cost is socialised (via Supplier TUoS charges for example).

2. Discussion Paper and Workshop 1.2

2.1 The Balancing Market & Imbalance Settlement

Most of the topics covered in this section are intricately linked with the Balancing Market (BM) and Imbalance Settlement. It is difficult then to tease out all the issues with these topics and come to conclusions in relation to the treatment in the I-SEM in the absence of understanding how both the BM and Imbalance Settlement will work. Each of these topics will need to be re-examined when the BM is being dealt with in this Detailed Design Phase.

2.2 Constraints

Principle of Unconstrained Market

- ESB GWM support the continuation of an unconstrained market into the I-SEM and the compensation for lost profits as a result of any system constraints. In principle a unit that is constrained down should retain any infra-marginal rent earned, and conversely a unit that is constrained up should receive at least its bid offer price. In this way a generator should be kept commercially neutral to constraints.

Interaction of Constraints and the Intra-Day Market

- After the DAM closes it seems both the Intra-Day Market (IDM) and Balancing Market (BM) will be in operation simultaneously. A generator that receives an instruction away from its DA position should not be excluded, for the part of its output related to the non-energy balancing action, from participating in the IDM. There is potentially a lost opportunity cost here for generators. So for example, a generator that is not scheduled DA, but receives an early constrained on instruction, is compensated at their bid price, and potentially misses out if the IDM and/or Balancing Price spikes. It is important that the settlement of constraints takes this into account. Compensation for constraints cannot be linked solely to DA price or early bids into the BM.

DS3 Revenues

- Currently the SEM arrangements do not compensate generators for lost Ancillary Services revenues when they are constrained off. Since revenues from DS3 System Services will in the future play a more important role in generators overall remuneration, it is important that generators that are constrained off are compensated if this means they would otherwise have been earning in the DS3 sector. Similarly, constrained on units, that earn DS3 revenues when constrained on will require less compensation therefore from constraint payments as such. Generator inc/dec bids into the BM should be allowed to facilitate this interaction with DS3 System Services. Compensation for constraints cannot be linked to energy prices only.

Out-turn Availability

- Currently in the SEM different rules exist in ROI and NI for the compensation of constraints under the circumstance where a generator is constrained off and is unable to export to the system due to a maintenance outage of the transmission connection assets of that generator. It is important that this issue is resolved.

2.3 Priority Dispatch

ESB GWM agree with the view in DP1.2 that it will be in the BM timeframe that the implementation of Priority Dispatch (PD) is important. PD can be achieved in the DAM and IDM through the commercial bidding behaviour of the PD generation.

However, as mentioned earlier, a clearer understanding of the design and operation of the BM is essential to fully appreciate how PD generation will be treated in the I-SEM.

2.4 Curtailment

Pro-rata

ESB GWM propose that in the I-SEM the technical and physical allocation of pro-rata curtailment be internalised within wind generation portfolios, rather than being applied by the TSO on a per unit basis. This would mean for example that a portfolio of three wind farms each of which is due to be curtailed by 10MW, can split this total of 30MW in any way across the three wind farms.

The I-SEM arrangements will necessitate by its design more active participation by variable renewable generation. Forecasting, trading ex-ante, managing imbalance position etc. will all be new activities. In such a world it is appropriate that portfolio variable renewables can have more control and discretion as to which units are curtailed.

This facility may also assist in the natural emergence of market based aggregators. If there is commercial advantage in distributing curtailment allocation in different ways, but which requires participants to act collectively, this will mean that an aggregator can bring added value to participants.

ESB believe such a change can be facilitated by the TSO and would be relatively straight forward to achieve.

Compensation / Cash-out

The cash-out of curtailment will happen in some way through the BM. As mentioned earlier, it is difficult to fully understand how it will all work without a more in-depth knowledge of the BM than is currently available from the HLD decision. It is important that whatever the detailed arrangements for this are, that they don't act as a disincentive to trade ex-ante. So for example, if a wind generator trades day ahead, secures firm volumes and prices and is then subsequently curtailed, they should not end up in a worse position financially than if they had not traded in the first place.

DP1.2 discusses how "wind" will be treated if curtailed. However, it should be noted that if a wind generator foregoes its PD status and becomes a Price Maker in BM rather than a Price Taker, then it should be compensated in the same way as any other Price Maker unit if they are moved away from their nominated traded position.

Export Only

At workshop 1.2 the TSO representative outlined the issue of how in the I-SEM the TSO would signal to the market how much of the PD scheduled was "un-useable". What volume of generation would have to either be exported or curtailed. This would allow the

market react to it, rather than relying on the TSO counter-trading. This is an important topic and one which could benefit with further engagement between the TSO and market participants in the future Rules Liaison Group workshops.

2.5 De Minimis Level

De Minimis Benefits

Much of the lobby to increase the MW threshold above 10MW is because of the commercial benefits that accrue from being De Minimis through avoided Supplier Capacity Charges. It is not clear whether such benefits were intended in the design of the SEM. It is therefore appropriate at this time to establish if there is any benefit to the system from having generation operating outside of the market (as De Minimis) and what exactly this benefit is. If there are any system savings or benefits then the generators that create the benefits should be able to share in it and this should be taken into account in the I-SEM design. If there is no benefit to the system, then the I-SEM design should not design a benefit in for De Minimis generation, particularly so given the potential for increasing volumes of small distributed generation in the future.

Max Threshold

No analysis was presented on the implications of increasing the MW threshold. It is not clear either how much extra generation would be eligible to become De Minimis were the threshold to increase. Analysis should be carried out to assess the impact on liquidity, price, efficiency of the market etc. While it could be argued that De Minimis generation would still be participating in the market (via the Supplier), this would need to be assessed.

In the absence of such analysis ESB GWM would caution strongly against any increase in the threshold.

3. Discussion Paper and Workshop 1.3

3.1 Currency

- ESB GWM favour the retention of a dual currency market with socialised current risk
- At this time we have no strong preference for the method of cost recovery, although we note that the current arrangements work well.

3.2 Participant Registration

- A single central point for registration for the DA, ID and Balancing Markets would be the preference for GWM as this would appear, from a participants point of view, to be the simplest and most efficient. If the registration for the Capacity Remuneration Mechanism could be included in this “one stop shop” then this would also be welcomed. While there will be differences in the information required for each of the DA, ID, BM and CRM

mechanisms, there will also be considerable overlap, particularly since participation in all will be on a unit basis.

- We recognise however that it may not be practical or easy to implement such a streamlined registration process. The efficiency for participants need to be balanced against the cost of setting up such an arrangement.
- With regard to elements for the current registration processes covered in AP1, and any changes that could be made for I-SEM, ESB GWM have the following comments:
 - In general the registration processes work well
 - Some of the changes (such as changing from Autonomous to VPT, or from “non-firm” to “firm” status) could be more streamlined
 - The time required to change status (e.g. from VPT or VPM) needs to be reduced
- It is suggested in DP1.3 that the registration process for smaller players should be designed to be “simpler and more straight forward than for larger players”. We consider that the focus should be on making the process as simple, efficient and straight forward for all participants. Larger portfolios, including future Aggregators, can have a large number of units so the process needs to be made efficient to ensure it is not cumbersome for either a small participant with just one unit, or a larger participant with many units.

3.3 Clearing and Settlement (Incorporating Billing and Funds Transfer)

Unit Settlement and Netting

Although settlement in the SEM is on a unit basis, invoicing is done by participant. This facility helps to ensure that the settlement process does not become too unwieldy for participants with many units. It is important then this type of arrangement is allowed in the I-SEM set up.

Importantly as well, the netting arrangements in the SEM allow participants to efficiently manager their collateral position. This facility should endure in the I-SEM design.

Other Comments

- Faster payment terms would be welcome in all time frames as this will allow participants to more efficiently manage their credit cover and cash-flows. However these benefits would need to outweigh the operational cost of more frequent settlement.
- Resettlement of the balancing market will be required since metered volume data will be required
- While pooling of invoices across the various revenue streams seems desirable, we would be concerned that it may not be practical to implement
- ESB GWM do not think that separate clearing houses would definitely be required for DA and ID settlement.

3.4 Credit Risk Requirements

- ESB GWM consider that it is timely that a review of the fundamentals of the credit requirements in the I-SEM take place. Other forms of collateral provision should be

assessed rather than limiting to the current accepted forms. ESB GWM would however still favour 100% collateralisation of the market.

- A single credit risk mechanism across all exposures would be the ideal position, however we would question whether the Forwards Market could easily be included in this.
- Ex-ante markets should limit trade up to posted collateral amounts. However there should be warning mechanisms inbuilt to ensure participants are informed when they are approaching these limits, so as to give them the opportunity to increase their cover.
- Central Counter Party
- Having a Central Counter Party (CCP) is a possible approach that can be taken to manage credit risk and bad debt in the I-SEM. However, ESB GWM are concerned that the common European approach taken to clearing (as described in Appendix A) may not work for the I-SEM given its size. Under the European approach the GCM role (as described in Appendix B) is generally provided by banks or other large financial institutions but there may not be any such players for I-SEM.

3.5 Shipping (Financial)

- ESB GWM have no particular comments in relation to the Shipping Agent, other than to say that if it is more efficient for the market to avoid the establishment of such a body, then efforts should be made, in terms of optimal cooperation between the Market Operators, to avoid having to do so. If it transpires that a Shipping Agent is required, then this should be done at least cost to participants.

3.6 Market Information

- It is difficult to say at this point whether the current policy on market information is fit for purpose in I-SEM. The details around any bidding rules etc. may drive requirements regarding transparency and publication of market information. Reporting under EMIR and REMIT should also be taken into account and data reporting should be streamlined.
- In general ESB GWM support transparency in terms of publication of market information. This allows participants understand and model the market. Without such transparency, barriers to market entry could be created.
- There may be requirement for TSO to publish more information than currently in the I-SEM. For example, TSO forecasts of wind, and wind curtailment. Also, if TSO are taking balancing actions while the IDM is still open, then publication of such actions may be required to be in the public domain, to mitigate against the constrained party having sole knowledge of potentially commercially valuable information.

4. Process

Industry Presentations

ESB GWM would welcome the opportunity for industry to present at the RLG workshops. This would be useful for both teasing out all the issues, but also importantly to allow participants to present suggestions on how different topics could work in the I-SEM.

Workshops / Engagement

ESB GWM welcome the delay of I-SEM go-live to October 2017. In addition to the increase in timelines we also think that far more industry engagement will be required in order to drive out the most suitable and efficient enduring market design. For example, given the list of topics to be covered in the upcoming “Markets” workshops, it seems inevitable that more than three workshops will be required. Topics such as the Balancing Mechanism will probably require a full session just for that topic. Also, if industry presentations are to be facilitated the plan for three workshops will need to be changed. It might also be useful to have an “end to end” workshop where all the topics are revisited but in such a way to show “a day in the life” of the I-SEM Energy Trading Arrangements rather than only ever looking at each topic discretely. All revenue streams and participants in the electricity generation and supply markets need to be considered, including DS3, and also network service providers in the gas market.

Euphemia Testing

ESB GWM would like to note our input into and support of the EAI proposals regarding proposals for Euphemia testing. In addition to the EAI proposals, ESB GWM also see value in having a stage of testing where the bids submitted by participants are confidential. This would allow participants to test their own bidding strategies more freely than they might do under the full disclosure testing. This then, would ensure that when Euphemia does go live, that participants are not trying out any untested bidding strategies which may result in unintended consequences for the full market.