



Energy for  
generations

A decorative wavy line that starts as a dark blue curve on the left, rises to a peak in the middle, and then descends to a yellow curve on the right.

Generation & Wholesale Markets

**ESB GWM Response:**

I-SEM Energy Trading Arrangements Detailed Design

Building Blocks Consultation Paper

SEM-15-011

March 25<sup>th</sup> 2015

## Introduction

ESB Generation and Wholesale Markets (GWM) welcome the opportunity to submit feedback on the SEM Committee's (SEMC) Building Blocks Consultation Paper. A summary of the main points are outlined in Section One below. More detailed comments on each of the topics are given in Section Two. There will be many interacting areas within the overall I-SEM design, and it is therefore very difficult to consider discrete topics, such as those included in the Building Blocks, in isolation of a full understanding of all the other areas. ESB GWM views below are therefore provisional. It may be necessary to review the Building Block topics when more details are known on both the "Markets" section of the Energy Trading Arrangements and also the DS3 System Services.

## Section One: Summary

- Transmission Losses: All markets, including the Balancing Market, should be traded at the same point, the Trading Boundary
- Interconnector Losses: Insufficient evidence is provided on what the impact of each of the configuration of interconnector losses would have on market outcomes
- Constraints: ESB GWM support the proposals in the consultation in relation to treatment of constraints in the I-SEM
- Non-Firm Access: ESB GWM support the proposal to allow generators with non-firm access to participate in the ex-ante markets. This would support market liquidity. The TSO should play an active role in giving non-firm generators advance notice of whether non-firm volumes can be accommodated, thus giving generators an opportunity to trade out any exposure in the Intraday Market (IDM). Without this notice, exposure of non-firm generators to Balancing Price risk may dis-incentivise participation in the ex-ante markets and therefore the approach proposed in the consultation would not be appropriate. Without commitment that the TSO will notify generators ESB GWM would not support the proposal and would favour a simple ex-post cash-out approach to ensure that the non-firm generator is no worse off as a result of trading ex-ante.
- Priority Dispatch: ESB GWM concur that it will be through the Balancing Market and Imbalance Settlement that Priority Dispatch will be implemented. Generators should continue to have the option of forgoing Priority Dispatch status by becoming Price Making and being treated like all other Price Making generators in the Balancing Market. A price floor should be introduced for demand side participation so that perverse incentives are not created such that artificial non-verifiable demand is incentivised in order to reduce curtailment.
- Curtailment: Analysis should be carried out in relation to the interactions between the incentive for wind to trade ex-ante, the impact that high levels of wind participation in the ex-ante markets will have on price formation and efficient market outcomes, and the impact curtailment compensation may have on these results. Compensation of

curtailment, for volumes traded ex-ante, should be continued if it is shown that it is in the interest of efficient market outcomes, which ultimately will benefit consumers.

- De-Minimis Level: ESB GWM consider that the current threshold of 10MW, above which participation in the market is mandatory, should not be increased.
- Currency: ESB GWM agree with the approach put forward in the consultation to continue with the dual currency facility and for the currency costs to be charged to suppliers as a tariff.
- Market Information: In general ESB GWM support the publication of market information to help with market transparency. In the I-SEM there will be a requirement for TSO demand and wind forecasts to be published in a timely manner.

## **Section Two: Detailed Comments**

### **1. Transmission Losses**

#### **➤ Generators**

ESB GWM remain of the view that the current policy of locational Transmission Loss Factors is flawed and does not act as an incentive for generation to locate at certain areas of the network. A simpler method would be to socialise all losses.

Notwithstanding the above comments, if the current locational policy is to endure into I-SEM, then ESB GWM preference would be to have the balancing actions priced at the Trading Boundary rather than the station gate, in order for consistency with pricing arrangements in the ex-ante markets.

#### **➤ Interconnectors**

Quantitative analysis of the impact of both options on how interconnector losses could be treated in I-SEM, would assist greatly in coming to a decision in relation to this issue. Consideration would also need to be given to any likely limitations on each of the interconnectors capacities, both in the import and export directions. We note that there is a current export limitation of 300MW on EWIC, and that the Moyle exports have also been limited to 80MW. In the absence of such analysis on market outcomes, it is difficult to make a decision on how they should be treated. However, given the locational nature of generator losses, the large variance in losses between both interconnectors, and the fact that under current arrangements they are separate, ESB GWM consider that separate loss factors should continue to be used.

### **2. Treatment of Constraints**

ESB GWM agree with the principle put forward in the consultation in relation to the treatment and pricing of constraints whereby:

- A generator that is constrained down from its ex-ante market position shall pay back the lower of its Dec bid or the Balancing Price; and
- A generator that is constrained up from its ex-ante market position shall receive the higher of its Inc bid or the Balancing Price

Linking compensation of constraints to physically nominated positions will help incentivise participation in the ex-ante markets.

The importance of the interaction between market should not be overlooked. Compensation for lost DS3 generator revenues as a result of constraint actions by the TSO should be a feature of the new market arrangements. While the procurement details of DS3 system services contracts have not yet been finalised, it is important that this issue should either be addressed either via constraint payments or the terms and conditions of the DS3 contracts.

### **3. Treatment of Firm Access**

ESB GWM support the proposal to allow generators with non-firm access to participate in the ex-ante markets.

However we are concerned that the SEMC proposal, to cash out constrained non-firm volumes at the Balancing Price, may actually act as a dis-incentive for non-firm generators to trade ex-ante. While this option has the distinct advantage of being simple to implement, the adverse impacts on the market outcomes may be significant given that there will be a large volume of non-firm generation in the I-SEM and with the delay in network build out and Associated Transmission Reinforcements, generation will be retaining non-firm status for longer. The only way this option could work, is if the TSO can give advance warning to non-firm generators that their capacity will not be able to be accommodated, thus giving the generators sufficient time to trade out of their positions in the IDM.

If the TSO can evidence why they would be unable to perform this role, then an alternative cash-out mechanism will be required. ESB GWM would not support any mandating behaviour into the Balancing Market. Since the majority of non-firm generation will be wind, which can be traded as a portfolio, it will in any case it be difficult to implement. The portfolio will have a mixture of firm and non-firm generators, with some generators having partial firmness. Instead a simple ex-post arrangement should be established. This arrangement should be designed to ensure that non-firm generation is not dis-incentivised from trading ex-ante and that any risk is limited or capped.

### **4. Treatment of Priority Dispatch**

ESB GWM concur that it will be through the Balancing Market and Imbalance Settlement that Priority Dispatch will be implemented. Generators should continue to have the option of forgoing Priority Dispatch status by becoming Price Making and being treated like all other Price Making generators in the Balancing Mechanism.

A price floor should be introduced for demand side participation so that perverse incentives do not occur such that artificial un-verifiable demand is incentivised in order to reduce curtailment.

## 5. Treatment of Curtailment

### Compensation & Cash-Out

The decision in relation to non-compensation of curtailment from 2018 was taken by the SEMC in the context of the SEM design. It is appropriate that this decision is reviewed now in the context of the I-SEM design. There will be a trade off between the cost of compensating wind for curtailment, and the dis-incentive non-compensation will create to participate in the ex-ante timeframes and the impact this has on market prices and efficient market outcomes. ESB GWM would therefore recommend that the type of high level analysis presented in the consultation in relation to this is elaborated upon. If it transpires that overall, more efficient outcomes are achieved if compensation is given to wind that is traded ex-ante, then the earlier SEMC decision on non-compensation for curtailment should be changed.

If the decision on non-compensation for curtailment for wind that is traded ex-ante endures into the I-SEM, then ESB GWM would support a cash out mechanism similar to the approach for the cash-out of non-firm constraints.

Mandated bidding behaviour should be avoided as it would be extremely complex to implement and monitor. It is not clear as well how it work since wind generation may be aggregated into portfolio bids, but due to TSO categorisation policy, some generators will be curtailed first, so curtailment will be on a unit basis. Therefore ESB GWM would favour an approach where curtailed volumes are cashed out at the Balancing Price and then some form of simple ex-post processing is applied.

### Pro-Rata

ESB GWM propose that in I-SEM the technical and physical allocation of pro-rata curtailment be internalised within wind generation portfolios, rather than being applied 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 more active participation of variable generation. Forecasting, trading ex-ante, managing imbalance positions etc. will all be new activities. In such an environment it is appropriate that portfolios of variable renewable generators have more control as to which units are curtailed. This facility will have advantages:

- It may assist in the natural emergence of aggregators as if there is an 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, rather than just mitigating new I-SEM risks for generators. This will help incentivise wind generators to participate in aggregated portfolios (which will trade ex-ante and help the market reach an efficient outcome), rather than just defaulting to the Balancing Market

- This facility may also assist in the cash out of curtailment as it would associate curtailed volumes with a portfolio, rather than a unit, which would be consistent with the portfolio based ex-ante traded and imbalance positions. Cash-out or indeed mandated bidding behaviour would have an extra layer of complexity without this.

#### **6. De-Minimis Level**

ESB GWM support the use of aggregators as a route to market for smaller market participants. Both commercial aggregators and the Aggregator of Last Resort will provide such a route. Therefore an increase in the De-Minimis threshold should not be required as any extra administrative or risk burdens a smaller participant may face can be mitigated through the use of an aggregator.

#### **7. Treatment of Currency**

ESB GWM support the SEMC proposal to operate the I-SEM on a dual currency basis. The suggestion to levy the currency costs on suppliers via a tariff seems reasonable.

#### **8. Market Information**

ESB GWM supports the approach to design systems for I-SEM such that the capability for the publication of data exists. Any restrictions on the publication can be dealt with at a later stage. In terms of data not currently published but which would be needed in I-SEM, both wind and demand forecasts will be required. Wind forecasts should be published on a regional basis at defined intervals during the day. Similarly updates on demand forecast compared with aggregated Physical Notifications should also be published at pre-defined times. Other information may also be required, for example if the TSO takes early energy or non-energy balancing actions this information may also be required to be made available to the entire market. Timely publication of Balancing Prices will also be required.

ESB GWM agree that there would be merit in the establishment of a market bulletin board for notifications of generator outages and other information as required.