



Gaelectric Holdings Plc

Feedback Paper to:

RLG Workshops 2.1 - 2.3

06/03/2015

Public

1 INTRODUCTION

Gaelectric Holdings Plc (Gaelectric) welcomes the opportunity to provide feedback to the joint Regulatory Authorities following the second phase of I-SEM detailed design working groups which concentrated on market design elements. We commend the inclusive approach taken to communicating with industry participants throughout the detailed design process. Gaelectric supported the approach to undertaking a greater number of workshops to accommodate effective discussion and debate amongst participants. We believe there are a number of outstanding items which merit further discussion in the Rules Liaison Group forum and believe that the consultation phase should be slightly delayed to accommodate 1-2 more workshops.

Gaelectric wish to highlight the need to always consider the High Level Design and the decisions therein in advance of publishing options in consultation documents. We believe the options presented during RLGs were often in conflict with decisions made in the HLD such as that the ex-ante and balancing markets would be unconstrained markets.

The brief comments contained herein are reflective of the high level information presented to date to the RLG panels and do not constitute a final position for Gaelectric. We therefore reserve our right to alter our views upon reflecting on subsequent I-SEM consultations.

2 RLG MEETING COMMENTS

The following section comments on elements of note or concern from RLG workshops 2.1-2.3.

2.1 EUPHEMIA

2.1.1 TESTING

Gaelectric welcome the prospect of industry involvement in commercial testing of the EUPHEMIA algorithm which is in the best interest of both participants and the market and system operators to understand the impact of different technologies and offer strategies on the system.

We encourage SEMO to include technologies which may not be in operation at present, but are likely to have an impact on day to day operations of the system. By way of example Project CAES is currently under development and has agreed a connection offer with SONI for 268MW of generation. We understand that Gaelectric will have access to the testing platform for Project CAES and welcome this opportunity, given the strategic importance that the project will have on the island, and its effect in lowering the curtailment of wind energy

Furthermore, we support a sensitivity analysis with varying levels of wind output imitating the potential progress towards targets and their impact on plant dispatch.

2.1.2 ORDER TYPES

Whilst there was no suggestion to the contrary, Gaelectric wish to put on record our belief that at this stage all order types should remain open for consultation, and the joint RAs should not take the view that some order types are more or less appropriate for the I-SEM in absence of a thorough consultation process.

We request further information regarding block bids and how price setting is affected in the DAM where block bids are concerned. We understand from the RLG meetings that block bids cannot set the price, we ask that

this is clarified and discussed further. It is clear that there is likely to be a number of generators preferring to use block bids to ensure facilities are operating in an efficient manner; Gaelectric are concerned that this may make the DAM particularly uncertain.

We disagree with the prospect of an “Information imbalance charge” which accounts for the deviation between the PN and the dispatch position. This is inappropriate given the balancing market is being designed to send a signal for generation and demand to remain in balance. An information imbalance charge is a double penalty for participants and presupposes that there will be a structural inefficiency in the balancing mechanism which does not encourage balance responsibility.

2.2 Physical Notifications

Gaelectric are concerned that Physical notifications and their impact on individual facilities or indeed the operation of the system, are not yet fully understood. This is likely to lead to inefficiencies in the consultation process. The RLG meetings made two attempts to discuss and conclude on PNs but it seems that many had outstanding questions.

We recommend an information paper is released to industry participants explaining in detail the proposals relating to linked PNs, fully de-linked PNs and partially delinked notifications and further how these options interact with bid offer formats.

We wish to make the point that making early judgement on the final position of a plant should not result in being penalised for the sake of attempting to provide information to help the TSO. De-linked PNs should be reconsidered on this basis.

2.3 Objective Function of the Balancing Market, Reaching a Feasible Dispatch & Pre-BM Action

From the outset Gaelectric wish to reiterate our concern with excessive actions in the balancing mechanism in the timeframe of DA gate closure (i.e. actions taken far in excess of 1 hour ahead of physical delivery) where system security is not at risk. We believe that under no circumstances will this serve to reduce the notification times of plants.

Instead, we believe that contracting with plants with long notification times will contradict the premise of DS3 which targets the incentivisation of a flexible, fast acting and reliable fleet to address system concerns. The energy and balancing market arrangements should follow these goals and as such the TSO should limit actions taken greater than 1-3 hours ahead of physical delivery.

In regard to the TSO taking energy balancing actions, we strongly believe that not allowing the system to balance itself will result in inefficiencies that will be counterproductive towards the goal of promoting balance responsibility.

The TSOs incentivisation in this area needs to be fully consulted and disclosed to the industry. Where the TSO is encouraged to reduce DBCs, it is highly likely that earlier actions will be taken and as a result, the TSOs actions will impact trades in both the IDM and BM. With this in mind we prefer to see a balancing principles licence consulted on with which the TSO must abide.

Ultimately the energy trading arrangements must compliment DS3 and the Reliability Option design which promote entry signals and should equally promote exit signals to generators who cannot operate within the parameters of the system requirements. Later TSO actions will incentivise investment in fast acting and flexible generation which ultimately will best serve the renewables industry and the consumer in the long run.

2.3.1 UNCONSTRAINED RUNNING PRINCIPLES

It is clear from the recent Rules Liaison Groups that the idea of early actions and the concept of unconstrained ex-ante and balancing markets are at odds.

The High Level Design made a decision that both ex-ante markets and balancing markets would be unconstrained markets, however the presentations by the joint RAs seem to indicate differently. Early actions (of which the potential volume has yet to be outlined) can essentially lock the generator out of the market from further trades or expose it to the risk of facing the imbalance market.

Examples below;

Numerical Examples (2)

- Unit sells 250MWh in the ex-ante markets @ 50 €/MWh (FAQ = 600MW)
- Submits FPN of 270MWh and Dec Bid to BM of 100MWh @ 45 €/MWh
- TSO activates this Dec Bid for non-energy action by dispatching unit at 170MWh
- The Imbalance price clears @ 70 €/MWh

Unit Dispatched down for Non-Energy
 Cashflow = Revenue from ex-ante trades
 - Imbalance Price * (Dispatch Quantity under Ex-ante Quantity)
 + Discount of Dec Price under Imbalance Price *
 lesser firm volume of (Dispatch Quantity under FPN) and (Dispatch
 Quantity under Ex-ante Quantity)

Direct from Algebra:

- 1) 250MWh @ 50 €/MWh
 - 2) minus 80MWh @ 70 €/MWh
 - 3) 80 MWh @ 25 €/MWh
- = 12,500 – 5,600 + 2,000 = €8,900

Alternative Breakdown:

- 1) 250MWh @ 50 €/MWh (Ex-ante trades)
 - 2) minus 80MWh @ 45 €/MWh (Activated Dec)
- = 12,500 – 3,600 = €8,900

The other two examples which were presented in the presentations consider the imbalance between the ex-ante trades and the FPN. This option doesn't take that FPN into consideration however. The reason for this is that the TSO is essentially setting the net target for the generator to hit, and anything outside of that is considered an imbalance.

For the avoidance of doubt, Gaelectric believed that that the maths should be as follows;

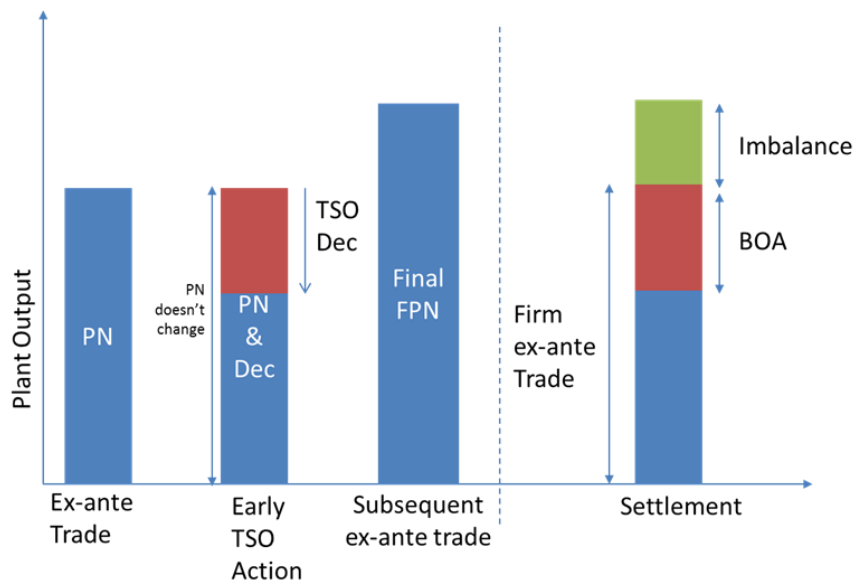
$$\begin{aligned}
 & (250\text{MWh} * €50/\text{MWh}) + (20\text{MWh} * €70/\text{MWh}) - (100\text{MWh} * €45/\text{MWh}) \\
 = & \quad 12,500 \qquad \qquad \qquad +1,400 \qquad \qquad \qquad -4,500 \\
 = & \quad €9,400.
 \end{aligned}$$

We understand the need to ensure that the market does not become self-dispatching, however it is clear that the early dispatch action here has locked the generator out of the market for further trades and exposes that generator to a balancing price risk. This is therefore a constrained market which is contrary to the decision in the HLD.

Our view of the market should be

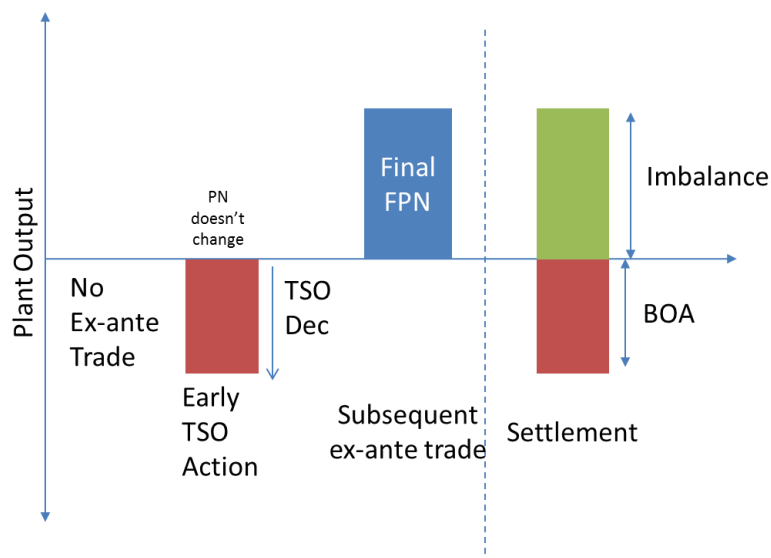
- a) TSOs should limit actions until the last available moment and allow for an unconstrained market to operate as intended.
- b) Where the TSOs take an action- this should not impact the ability of the generator to continue to trade in the ex-ante markets as per an unconstrained market.
 - a. We support transmission constraint licence conditions to avoid local market power.

Our understanding of the ruleset as proposed is shown in the figure below.



We do believe that the difference between the PN and FPN (if traded ex-ante) will not in fact be an imbalance, and we struggle to understand how the system will see it as one. Nonetheless this is our understanding of the algebra as presented.

By way of another example, in a situation where an energy storage facility does not achieve a PN in the DAM, and intends to operate in the IDM, however the TSO takes an early action to turn on the demand of that plant, under the proposed arrangements, that storage plant is then locked out of generating for that period even where the IDM sends a signal that generation is subsequently required. The market will see this subsequent generation as an imbalance.



Leaving such subsequent trades to be settled at the prevailing balancing price is unacceptable for the following reasons;

- The imbalance market is particularly volatile and will not support investment into new entrants
 - Indeed, it is believed that given the level of constraints, there will be no energy actions remaining to set the balancing price, and this may instead revert to a proxy price.

- This risk of being exposed to volatile or proxy imbalance prices will result in bids in ex-ante markets reflecting the potential opportunity cost of being called for early actions. This creates a volatile DAM and IDM.
- This is contrary to the principles of an unconstrained ex-ante and balancing market.

Gaelectric ask that joint RAs consider this point strongly in advance of publishing a consultation, and further that the options presented do not conflict with the decision of the HLD.

In summary we believe that accepted BOAs should not impact in any way the further trading opportunities of participants for the remaining hours of the ex-ante markets. Specifically if a generator is Dec'd from a min stable load in an early action, that generator should be able to trade up to full output in the remaining hours as may otherwise have been the intention. The TSO can at that point decide whether to take a further Dec action from full output to min stable load.

Storage plants should not be adversely affected by this design also, and should be allowed to trade freely in an unconstrained market without being unduly exposed to the risk of the imbalance price.

2.3.2 DESIGN PRINCIPLES

As a final point, Gaelectric believe that the design of the I-SEM is wrongly being focused on the “what-ifs” rather than the fundamental design questions for normal operation of the market. To continue as the current approach is akin to presupposing that the market will be broken from the outset.

2.4 Forms of Bids and Offers

Simple Bids and Offers:

It is not clear to Gaelectric if the simple bid/offer format will create unforeseen challenges to the TSO reaching a feasible dispatch given the onus is on the generator to ensure the PN within the settlement period is a correct volume, however there are numerous ways that the same volume can be represented (as outlined in the presentation slides). We believe the TSOs should consider the potential impact, if any, of this on their ability to balance the system.

Absolute MWs:

We believe these options will not suffice where Incs and Decs cannot be submitted separately. Generators will submit asymmetrical Incs/Decs based on a number of factors and this option does not seem to cater for this. It is likely that premiums would be built into prices to counter this.

2.5 Bid/Offer Acceptance & Undo Pricing

We request clarification from the RAs in the consultation that there are no plans to net TSO actions, and instead an early Inc instruction and subsequent Dec instruction from the TSO will be treated as two distinct actions.

This will be a requirement of REMIT legislation (all trades to be reported individually with a time stamp).

3 CONCLUSION

In conclusion, Gaelectric wish to take the opportunity to commend the joint regulatory authorities for their efforts to open the lines of communication in the development of the ISEM detailed design. Notwithstanding this we believe the principles of design would be better served by concentrating on an efficiently operating marketplace. We believe there is too much focus on the “what-ifs” and extreme scenarios, which has ultimately led to quite some level of confusion amongst market participants.

For this reason we ask that the joint RAs produce an information paper on key topics such as Physical Notifications.