Gaelectric Holdings Plc.

Response Paper to:

I-SEM Building Blocks Consultation Paper

SEM-15-011

Gaelectric Holdings Plc. Response

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1 EXECUTIVE SUMMARY

Gaelectric Holdings Plc. (“Gaelectric”) welcomes the opportunity to respond to the I-SEM consultation paper on the I-SEM Building Blocks Consultation. We commend the joint Regulatory Authorities (“RAs”) for the considerable work undertaken in liaising with industry via the Rules Liaison Group meetings 1.1-1.3 ahead of the release of this consultation. We support further industry engagement throughout the I-SEM programme.

Gaelectric is an independent wind and energy storage developer operating within the Republic of Ireland, Northern Ireland and North America. To date Gaelectric is developing a wind energy portfolio of 15 projects with planning consent in Ireland, with its first wind farm becoming operational in May 2011. Within the Republic of Ireland, Gaelectric have commissioned two projects, with three projects in the construction phase, two projects that have planning permission and the remaining project is within the planning process. Ten projects are currently at various stages in the construction, financial close and planning process in Northern Ireland with a further 2 projects operational. Gaelectric’s total operational capacity is now 66MW with a further pipeline of circa 150MW in various stages of planning and construction. In the USA, Gaelectric currently manages a portfolio of up to 400MW capacity land options with permitting in progress. Furthermore, Gaelectric has recently completed the acquisition of Imperative Energy Ltd., a leading supplier of bioenergy solutions to a number of sector throughout the UK and Ireland.

Having developed our portfolio of wind assets through early stage planning through to construction and operation phases, and in doing so becoming one of the largest independent developers on wind energy on the island, Gaelectric are acutely aware of the challenges that are faced by renewables on the island as a result of the development of the I-SEM. Specifically, we are cognisant of the increased risk on wind posed by the proposed I-SEM design. We are however supportive of the I-SEM programme and committed to engaging constructively throughout the programme.

As an overarching comment on the wider I-SEM consultation process, we request that where the RAs propose a policy, and indeed indicate a preference, which will have a considerable impact on the business model for any market participant, that this policy is supported by a substantive qualitative and, where possible, quantitative analysis. It is inappropriate to take such important decisions without being in a position to adequately consider the impact on participants and future investment in the industry. We believe some policy objectives have not been adequately assessed for their impact on investment and we would strongly urge the RAs to be mindful of the importance of designing a market which supports investment and does not pose unnecessary risks on current or future investments.

It is clear that the building blocks consultation sets the stage for the renewable business model moving forward. Gaelectric’s response will concentrate on ensuring that the design does not heighten the inherent risks posed by the I-SEM. We therefore expect to see consistency across policy objectives including the encouragement of Day Ahead Market (“DAM”) participation without simultaneously exposing renewable generators to unacceptable risks in the imbalance market as a result. The DAM is the appropriate marketplace to direct liquidity, but this will not be achieved by
contradicting policies which in effect will expose renewable generators to price risk as a result of their attempt to trade in this marketplace.

Gaelectric support further advance consideration of interlinking policies such as the reliability option and renewable subsidies reference market which will be an important consideration for decisions such as those referred to above.

Our comments are intended to encourage policy objectives which promote liquidity in the market, and minimise the barriers of trade between neighbouring markets whilst ensuring that current and future investments are safeguarded.
2 GAELECTRIC RESPONSE

The response herein is structured as follows.

Section 2.1 discusses the proposed treatment of transmission losses.

Section 2.2 discusses the treatment of constraints in the market.

Section 2.3 discusses the treatment of firm access in the I-SEM.

Section 2.4 discusses the treatment of priority dispatch in the I-SEM.

Section 2.5 comments on the discussion regarding the de-minimis level in the I-SEM.

Section 2.6 discusses the treatment of currency costs in the I-SEM.

Section 2.7 comments on the market information proposals in the I-SEM.

Section 2.8 discusses curtailment specifically.

Section 3 concludes the Gaelectric response.
2.1 Transmission Losses

2.1.1 GENERATOR LOSS FACTORS

Gaelectric have no substantive concerns with the proposals on the treatment of transmission losses in the I-SEM. At this point we believe that option (a), actions priced at the trading boundary, is most appropriate across all trading platforms, i.e. DAM, IDM, BM.

We do not see the value in separating the DAM and IDM from the BM given the BM will be open in parallel to the IDM and 2 distinct methodologies for calculating pricing creates confusion.

The paper suggests that option (b) may be more amenable given the TSO could alter its systems for the BM centrally. We remind the RAs that participants will need to upgrade their systems for the DAM and IDM where any change to transmission loss policy occurs, and the benefit proposed is therefore a moot point.

Given there is no obvious commercial (dis)advantage of either proposal, we support the pricing of all actions at the trading boundary which takes the account of losses into the control of the generator. Furthermore, we believe that suppliers and portfolio aggregation of wind will need to be priced at the trading boundary given there is no obvious method in which the relevant authority can apply an accurate blended loss adjustment factor to a portfolio of assets across a diverse geographical spread.

**Conclusion:**

Gaelectric support all trades to be priced at the trading boundary, including BM trades.

2.1.2 INTERCONNECTOR LOSS FACTOR

Gaelectric support individual loss factors on the interconnectors which supports a reduced deadband with which neighbouring markets can trade.

**Conclusion:**

Gaelectric support the separation of loss factors on interconnectors rather than a “one-size fits all” approach.
2.2 Constraints

Gaelectric support the pricing proposals in the consultation paper which recognises that generators who provide non energy actions to the system are also providing a service in the overall supply/demand balancing paradigm.

We further request that the RAs address how they propose to implement the complete set of rules currently in place for priority dispatch and constraints, which provide to a wind generator the following:

- The right to physically deliver its power (subject to maintaining secure operation of the electricity system); and
- Guaranteed access to the ex-post schedule (i.e. the balancing market) at a rating equal to what the generator was available to produce, in the event that the generator is constrained/curtailed.

It seems the latter has not been considered in the consultation paper. The High Level Design indicated that current policy would be implemented where possible in the I-SEM. The Building Blocks consultation paper does not mention this latter policy however.

Our concern here is not under circumstances where there is no effort made to trade in the ex-ante timeframes, rather where there are inaccuracies in the forecast of wind in situations where all reasonable efforts are made to trades volumes DA. In this instance by virtue of an error in forecasting, the ability of the generator to receive full constraint payments (for firm access plants) is limited given the untraded volume will be ‘forgotten’ in the BM. If this is the case, we believe the existing policy on firm access is heavily diluted, and is done so in absence of any impact assessment. Gaelectric reject any such changes to the constraints policy.

To support current policy we believe that the full value of potential (available) electricity is sold unconstrained in the BM market and subsequently constrained by reference to the Dec. This can be addressed as per current market rules whereby an availability signal is profiled by the TSO on the priority dispatch generator and submitted to the NEMO for settlement processes.

We do not believe that our proposal encourages generators to leave all trades to turn up in the BM without attempting ex-ante trades. The DAM will be the focus of liquidity in the market, making the balancing market more volatile and renewable generators will therefore not actively accept the price risk in the BM. The DAM is therefore likely to adequately incentivised to encourage prudent levels of trade. This is further supported by the seemingly likely use of the DAM for reference pricing purpose.

As an aside, we wish to highlight ahead of the markets consultation that the High Level Design indicated that the ex-ante markets would remain unconstrained. We expect that the ex-ante markets are therefore designed as such. Our understanding of the proposals on constraints by way of early TSO actions (those actions which take place in advance of ID gate closure) from the RLG meetings is that this will dispatch profile from the TSO will effectively limit the trade of further electricity in the remainder of the ex-ante market.
By way of example, see the figure below;

In this situation;

- The generator in question has an MEC of 150MW
- The generator trades 100MW in the DAM.
- The TSO subsequently Decs the plant as a result of a constraint down to 75MW. This is an early TSO action ahead of the ID gate closure
- In the last hours of the IDM, after the TSO action, the generator trades the remaining MEC up to 150MW as the FPN

- The latter IDM trade is then seen as an imbalance given the TSO earlier sent an instruction to dispatch at 75MW.
- In settlement the generator receives the price in the DAM and IDM for its trades, pays back the BOA for the TSO action, and is Dec’d from 150MW down to 100MW at the imbalance price.

It is the last element which is of concern to Gaelectric. Given the DAM and IDM are unconstrained markets by design, the constrained action from the TSO must not create a situation where due to this action, any further trades by the generator are Dec’d at the imbalance price. This will create a substantial inefficiency in the market and result in trades in the IDM (i.e. the final 50MW trade...
struck in the IDM) not reflecting the cost of trading that volume, but rather will represent the price at which the generator can be sure they will receive a profit when Dec’ed at a later stage.

We believe that this will have very far reaching effects on the market and hence believe that the High Level Design in this instance should be adhered to, and market participants must be able to trade their assets to their full capability without being impacted by the constraints actions taken by the TSO.

This should be further considered at the RLG before going out in the Markets consultation. We welcome further engagement with the RAs on this.

**Conclusion:**

Gaelectric support the principles of non-energy actions being paid at the greater of the offer price or clearing price, and similarly for constrained down actions to pay the lesser of the bid price or clearing price in the market.

Constraint payments should be made in full for volumes not traded ex-ante. These payments should be cleared at the balancing price.

Gaelectric would like to take the opportunity to oppose any changes to the High Level Decision which stated that the ex-ante markets would be unconstrained. We do not believe therefore that TSO constraint actions taken early should impact the commercial position of a generator nor impact on their ability to trade the full volumes of their unit unconstrained in the ex-ante markets.
2.3 Firm Access

Gaelectric strongly urges the RAs to consider the treatment of non-firm access generators in the context of maintaining the considered investment in renewables to date and the requirement for significant further investment in the industry which supports the achievement of renewable targets. Gaelectric are concerned that the proposals contained in the consultation document could be viewed as amounting to a retrospective change in policy and create unwarranted risk on generators. Such risk is unpalatable to the investment community and hence we wish to take this opportunity to warn the RAs of the consequences of same.

Our understanding of the proposals as outlined are as follows;

- Ex-ante trades made for non-firm volumes, which are subsequently constrained, are cashed out at the prevailing imbalance price; or
- Ex-ante trades made for non-firm volumes, which are subsequently constrained, are cashed out at a Dec price related to the blended cost of the ex-ante trades.

Whilst the paper indicates there should be no prevention of ex-ante trades for non-firm generators, we believe the former proposal amounts to an equivalent policy given the risk on non-firm generators of traded ex-ante volumes which may be subsequently paid back at a volatile balancing/imbalance price.

We further believe that this policy will prevent reasonable access of wind generators to the Reliability Options market where the reference price is not the balancing market.

A policy where non-firm volumes hold such risk will result in unintended consequences in regard to contracts for N.I. CfDs given the PPA counterparty cannot guarantee that that the DA volume will not be eroded by virtue of the fact of a balancing market with volatile prices. This will present further challenges to contracting in Northern Ireland for renewable generators.

Such a policy is likely to have a material impact on liquidity in the ex-ante markets, which is contrary to the objective of the RAs in designing the DAM and IDM. It is likely to have the effect of forcing generators into the balancing market and inappropriately deterring ex-ante trades. Furthermore, we believe it could lead to a material increase in the reliance on the PSO levy under the current REFIT regime.

In respect of the alternative proposal where by the generator must trade its volumes out if notified that it will not be dispatched above its firm access, we do not believe this options is workable in operation.

This option will pressurise both the TSO and the participant in respect of their responsibilities and it would likely be argued that sufficient time would be at least 6 hours out, which nullifies the proposal given the TSO quite often will not have access to the requisite information 6 hours or more ahead of real time to make effective decisions on feasible dispatch.
Conclusion:

Gaelectric are strongly opposed to any policy which invokes risk on a generator making an ex-ante trade. We support the latter proposal (cash out constraints at a Dec price related to the ex-ante trades) which does not invoke the same risk on the generator. This structure should be centrally managed. We do not agree that this would be overly complex to operate and instead believe that the monitoring of individual generators management of the bidding of blended ex-ante trades as Decs will be more difficult and time consuming for the relevant authority.

We do not believe this option absolves the generator of risk or exposure in the BM. Our support is specifically to mitigate risks in instances of constraint (the instance of which is relatively low in comparison to the total volume of trading), however these generators will continue to be exposed to the BM in respect of forecast error or poor trading decisions. There is therefore an incentive on the generator to look to the DAM to find liquid volumes with which to trade.

We further wish to take the opportunity to reiterate our concerns that proposals are being made in absence of an adequate level of qualitative or quantitative assessment of the effects on renewables on the island.
2.4 Priority Dispatch

Gaelectric’s understanding of the proposed option is that it is for the generator to decide the level of BM risk it wishes to take by making firm ex-ante trades which are secured.

Gaelectric support this proposal with the additional caveat that in order to maintain the absolute definition of priority dispatch, the TSO must accept all available volumes from the generator. As such we believe that the availability metric derived from SCADA, calculated ex-post for settlement purposes, should drive the priority dispatch process rather than a Physical Notification submitted by the generator which would effectively limit the absolute definition of priority dispatch that exists currently.

Conclusion:

Gaelectric support the proposals in the paper subject to priority dispatch covering all available volumes and not simply those under a PN or FPN.
2.5 De-Minimis Level

Gaelectric welcomes consideration and discussion of the de-minimis level in the I-SEM. Trading de-minimis projects currently reduces the burdens of market registration, enhances the commercial opportunity and is reflected by a simpler methodology for trading (given the de-minimis generator is netted from demand in a demand portfolio).

There is therefore enhanced value to the consumer given the reduced administration costs to suppliers and increased offsetting of demand charges as a result of contracting with a de-minimis generator.

Gaelectric were encouraged to see that the HLD did not indicate that any of the above benefits would be eroded.

Whilst we support the continued use of the de-minimis level in the I-SEM, we believe that participating generators (greater than the de-minimis level) will begin to see encouraging steps in a similar direction in the I-SEM from the perspective of simpler market registration and trading (portfolios will not require forecasts of individual generators). As such we do not see merit in increasing the de-minimis level at this point.

For this reason, and further to preserve liquidity in the ex-ante and BM timeframes, we support the de-minimis level remaining at 10MW.

**Conclusion:**

At this point, Gaelectric believes the de-minimis level should remain at 10MW.
2.6 Currency Costs

Gaelectric support the proposals in the paper which propose a tariff for managing currency costs in the I-SEM. We believe the net cost will be immaterial given the short settlement timeframes, however we nonetheless support transparent methodologies to deal with this.

Conclusion:

Gaelectric support the RAs proposal for tariffs to manage currency cost in the consultation paper.
2.7 Market Information

Gaelectric welcome measures to improve transparency in the I-SEM which will be crucial to assisting suppliers and generators alike to form a sensible trading strategy particularly in the IDM timeframe. This information should be centrally published.

We believe the RAs should target transparency levels as seen in the BETTA market, however should equally monitor the occurrence of local market power as a result of the increased flow of information.

Gaelectric particularly believe the following should be published on a regular basis;

- TSO wind forecasts which are updated regularly to support ex-ante market interactions, particularly for smaller generation. The granularity of these should be consulted further however we stress that the information should be adequate enough to support IDM trading activities for generators.
- Demand forecasts published on a similar basis to the above
- System imbalance condition (i.e. how long/short the system is)
- Early TSO actions taken for any reason including energy/non-energy actions should these arise. This should be considered in market power workstreams also.

Conclusion:

Gaelectric support any and all measures to increase transparency in the market, and to support prudent trading within the market timeframes. We request that all available information is centrally published to reduce the barriers of trade for participants.
2.8 Curtailment

Gaelectric remains of the view that the SEMC decision to remove compensation for curtailment of wind is unjust and discriminatory. We believe the change singles out a specific class of generation and disadvantages this class of generation without having been presented with any robust reasoning as to why.

It is clear that where other classes of generation are turned down to comply with system constraints such as in this case of reserve, those generators are recompensed for doing so. What is further apparent to Gaelectric is that curtailment of wind is as a result of a constraint on the system, i.e. the SNSP constraint, which limits the amount of non-synchronous penetration at any one time. Moreover, all other constraints envisaged by the RAs in their substantive list of non-energy actions are proposed to be compensated under a prudent methodology, with the exception of curtailment.

We further believe that removal of compensation for curtailment will equally act as a disincentive for wind to operate in the DAM, as recognised in the consultation paper by the RAs. Whilst we agree that the potential loss of wind participation in the DAM cannot be definitively assessed from a quantitative perspective, it is clear that continuing with the existing policy will have the effect of reducing liquidity in the DAM, which will likely affect the cost to the final consumer.

Moreover, we are concerned that the decision is contrary to other markets including that of GB, with which the I-SEM will create a CoBA. Gaelectric have long supported the design of a market which fully accommodates harmonisation in pricing, settlement and regulation rules with our neighbouring markets. The decision regarding the remuneration of curtailment does not achieve this and furthermore will likely act to skew the price curves between both markets.

The decision on the removal of compensation for curtailment was made in consideration of the SEM market and indeed in advance of the HLD decision for the I-SEM. The I-SEM represents a materially different marketplace, and this policy is highly likely to be a net cost to the consumer. We note that reducing consumers exposure to the cost of curtailment was a primary reason for implementing this policy which further adds weight to the proposal to reconsider the decision in the context of the I-SEM. Given this, we appeal to the RAs to give consideration to further consultation on this area which reviews the issues and makes a decision on the approach moving forward given more accurate information regarding the operation of the I-SEM.

Absent this, we are concerned that exposing renewable generators to imbalance prices will reduce the incentive for renewable generators to trade in the DAM. We request that at this point in the process if there is no agreement to re-open the decision on compensation for curtailment, we request that no decisions are taken at this point until such time as the design of the balancing mechanism is more apparent.

Conclusion:

Gaelectric request the reconsideration of the rules for compensation for curtailment given we believe this to be discriminatory and not in keeping with the principles of the I-SEM, nor in the interest of the consumer. We are uncomfortable with imbalance price risk on curtailed volumes, given the unknown nature of the design of the BM.
Absent a revaluation of the compensation decision for curtailment, we request that a decision on curtailment is postponed until a later consultation.
3 CONCLUSION

Gaelectric appreciate the opportunity to respond to this consultation on the Building Blocks consultation for the I-SEM. We look forward to engaging with both the SEM Committee and industry over the coming months in the detailed design process.

For your convenience, we have restated below the summary statements which are included within the document.

- Gaelectric request that all decisions with a material impact on the business model for any market participant be thoroughly considered with a qualitative and quantitative impact assessment.
- Gaelectric support all trades to be priced at the trading boundary, including BM trades.
- We support the separation of loss factors on interconnectors rather than a “one-size fits all” approach
- We support the RAs proposal on the payment of non-energy actions at the higher of the generator’s Inc or the cleared price and conversely the lower of the generator’s dec or the cleared price for constrained down actions.
- We do not support any methodology which exposes non-firm generators to imbalance prices as a result of attempting to trade prudently in the DAM, and in so doing, improving liquidity in the ex-ante timeframes and efficiency of flow on the interconnector.
- We support the proposals for priority dispatch however on the basis that this is defined as for all available generation as opposed to a volume linked to a PN or FPN.
- At this point, Gaelectric believes the de-minimis level should remain at 10MW.
- Gaelectric support the RAs proposal for tariffs in the consultation paper.
- Gaelectric support any and all measures to increase transparency in the market, and to support prudent trading within the market timeframes. We request that all available information is centrally published to reduce the barriers of trade for participants.
- We strongly urge the RAs to reconsider the decision to remove curtailment from wind for the reason that this decision was made in absence of any consideration of the I-SEM and the impact that this decision would have for this market and potentially for consumers.

Given the importance of the detailed design on the Gaelectric Group and its assets in development including both Project CAES Larne NI and a significant wind portfolio within the timeframe of this market redesign, we request that the RAs continue with the RLG format for the remainder of the detailed design. The RLG has been mutually beneficial for RAs and participants, and the healthy debate at the previous meetings have led to positive solutions to a number of topics.

In the meantime, should you have any queries you would like to discuss, please do not hesitate in making contact on the details below.

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