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Clive Bowers Commission for Energy Regulation The Exchange Building Tallaght Dublin 24 Jean-Pierre Miura Utility Regulator of Northern Ireland Queens House 14 Queen Street Belfast BT1 6ED

Date: 26<sup>th</sup> November 2014

## RE: Feedback following I-SEM Energy Trading Arrangements "Building Blocks" Workshops

Dear Clive/Jean Pierre,

Brookfield Renewables welcomes the opportunity to provide comment on the regulatory engagement to date as part of the Energy Trading Arrangements (ETA) work stream, which has primarily consisted of three "Building Blocks" workshops attended by members of the Rules Liaison Group (RLG). We also welcome the opportunity to provide comment on the proposed approach to Euphemia testing as outlines by the market operator, SEMO, in the first Rules Liaison Group (RLG) workshop.

While we welcome the opportunity to comment we would like to highlight that a number of topics addressed in the Building Blocks workshops are closely linked and/or inter-related. Furthermore the treatment of these topics in the Market Design workshops will also influence the view of market participants. For example the design of the balancing market and treatment of imbalance payments will impact largely on the treatment of priority dispatch, curtailment, constraints and non-firm generation. For this reason the views expressed below should not be regarded as final or definitive views of Brookfield Renewables with regards to these topics but are reflective of discussions to date.

The ISEM market redesign represents an enormously challenging programme of work for all stakeholders, not least market participants. The timelines put forward in the initial ISEM Project Plan are very challenging and for the programme to be a success it will require all stakeholders to work effectively and efficiently together. To this end Brookfield Renewables look forward to continued close engagement through the detailed design of the Energy Trading Arrangements work stream and indeed throughout all the other I-SEM work streams.

Our comments include a request for additional work shops for the ETA and other work streams. We would like to see this request and our other comments on I-SEM engagement reflected in the publication of an update I-SEM Project Plan.

Regards,

Ciarán O'Brien

Power Marketing - Regulatory Lead Brookfield Renewable Energy Group (Ireland) {By email}

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Торіс	Comments for Feedback
Topic Comments on ISEM Engagement in ETA Work stream	<ul> <li>Comments for Feedback</li> <li>More workshops are required for the Market Design stage of the ETA work stream. The current plan suggests the design of the Balancing Market will be covered as part of the second Market Design workshop. This is wholly inadequate for a crucial part of the market design which impacts on a number of keys areas such as Priority Dispatch, Curtailment and Constraints, Treatment of Non-Firm generators.</li> <li>Additional workshops are suggested such as: <ol> <li>Day Ahead/Euphemia, 2. Intraday Market, 3. Feasible Dispatch and Tagging &amp; Flagging, 4. Balancing Market and Imbalances, 5. Wash-Up Session to include topics not addressed (Physical Shipping, Global Aggregation, Profiling, Local Market Power, Reserves), 6. Additional session to review outcomes of Building Blocks given outcomes of Market Design workshops</li> <li>There must be an opportunity to comment on Building Blocks following publication of the Markets Design Consultation as they overlap. This should be formally acknowledged by RAs.</li> </ol> </li> <li>More workshops and greater levels of engagement are needed across a number of work streams and need to be reflected in a revised ISEM project plan (for example 4 workshops for the entire CRM work stream is inadequate).</li> </ul>
Comments on	Requirements for Wind Generators of Euphemia Proof of Concept and
Euphemia	Regression testing:
Testing	<ul> <li>Detail on how a Variable Price taker is treated within EUPHEMIA in the Proof of Concept testing being undertaken by SEMO</li> <li>The impact of unit versus portfolio participation of renewables through proof of concept testing.</li> <li>Test cases to include differing levels of wind on the system (including extreme events)</li> <li>Test cases to include varying wind forecast error rates (one case could assume the same error rate across all wind farms as per current SEM, another could vary error rates across wind farms/portfolios participating in commercial testing to see the impact on DAH prices.</li> <li>Transparency of bids and outcomes from commercial testing so that all market participants can learn from a wider variety of bid structures and test cases and gain greater comfort with the operation of the Euphemia algorithm.</li> </ul>
Building Blocks Treatment of Losses	<ul> <li>Workshop 1</li> <li>The principle behind the inclusion of locational signals is that it will influence the decision on where to local generation so. However, with the advent of renewable generation, this choice is often unavailable as generation should locate where the renewable resource is most abundant, which is often not close to centres of demand.</li> <li>There is a concern that as losses are excluded in many other European markets, SEM participants, by accounting for transmission losses in their bids, would be effectively disadvantaged compared to other participants of coupled markets.</li> </ul>
	Losses across both Moyle and EWIC interconnectors should be treated separately



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	(i.e. different loss factors for EWIC and Moyle) to ensure that the most efficient
	asset is used and therefore the most efficient market outcome is achieved.
Firmness	The principle of firmness must be retained in the I-SEM (i.e. there must be a difference and value to having a firm connection as opposed to a non-firm one).
	The principle of firmness relates to a generators physical access to the grid. Non- firm generators differ only from firm generators as the physical infrastructure required for reinforcement of the network as a result of their addition to it has not been completed. Non-firm generators can be dispatched away from their market position as a result of this, through constraint actions.
	Non-firm generators should not be disadvantaged with regards to participation in ex-ante markets.
	A wind generators entitlement to priority dispatch is independent of the firmness of their grid connection and must be retained.
	Exposing non-firm generators to a cost for being dispatched down is not acceptable and would disincentivise non-firm generators from participating on exante markets and only result in non-firm generators spilling into the balancing market, contrary to the aims of the I-SEM High Level Design.
	Ensure non-firm generators are revenue neutral if dispatched away from their market position in the ex-ante market timeframes is equivalent to the current treatment of non-firm generators in the SEM.
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	against ex-ante positions in the DAH and IDM markets while firm generators are paid the higher of their bid price and the marginal balancing price.
	The definition of curtailment as a network or energy balancing action must be clarified, as its definition will affect its treatment in the balancing market.
	As long as compensation for curtailment remains curtailed wind generators should be entitled to submit their Decremental bid the same as any other generator that is dispatched away from their market position.
	If compensation for curtailment is removed generators would at a minimum have to be treated the same as non-firm generators that are constrained down, i.e. brought back to a revenue neutral position compared with their ex-ante market revenues.
Priority	We agree that priority dispatch most likely only applies to the balancing market.
Dispatch	
	There remains a great deal of uncertainty as to the effect of priority dispatch on prices in the balancing market.
	A balance must be struck between incentivising ex-ante market participation (minimising the need for balancing actions) and respecting the relevant generators entitlement to priority dispatch.
	Priority dispatch is afforded to other technologies besides wind that are price- makers in the market and this must be considered in its treatment.
	With regards to the options put forward; priority dispatch generators must be held whole against their ex-ante market positions at a minimum.
	For additional volumes from priority dispatch generators in the balancing market, receiving an imbalance price may be the solution but the formulation of the imbalance price is yet to be decided on and will have a real effect on the solution for priority dispatch.
De-Minimis	The rationale for De Minimis levels remains relevant in the ISEM. This is that:
Levels	- De Minimis generator due to their size do not have the scale to invest in direct
	participation in the market
	- Allocating De Minimis generators as negative demand ensures that generators
	overhead that comes with being a full market participant
	- This helps to ensure that there are no undue barriers to entry for small
	generation projects
<b>Building Blocks</b>	Workshop 3
Currency	The current approach to operating with dual currencies results in a currency risk
	between when bids are submitted (D-1) and the market settled (D+4). The
	currency risk time periods in the ISEM should decrease as the ex-ante markets become firm (Day Ahead, Intraday) thereby reducing the likely currency imbalance.
	Currency imbalances are currently socialised and considered relatively immaterial.
	Moving to ISEM should result in lower currency imbalances so there is no reason the current approach should not be continued.

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	Currently when trading across the interconnectors, the SEM operates on a fixed FX rate. How would the FX rate be treated in the UK?
Participant Registration	If there is only one power exchange/market operator in the ISEM (SEMO), then cost and process efficiencies should be captured by having a single (multi-part) process for participant registration.
	A more streamlined process for registration / de-registration / changing from autonomous to variable price taker than the current process is also sought as the current process for a relatively minor change is quite lengthy and tedious.
Clearing and Settlement (incorporating Billing and	The approach of the existing SEM to settlement is a result of the structure of the market where prices are made firm D+4 and the Capacity Mechanism is an integral part of the market.
Funds Transfer)	As Day Ahead and Intraday markets will become financially firm in ISEM (i.e. out- turning prices and volumes will be honoured) there is no reason why settlement cannot take place far quicker than current SEM arrangements.
	The settlement of the Balancing Market presents more challenges than the ex-ante market timeframes as outturn demand and wind is required as well as metered generation and usage from all market participants (this being the reason that the current SEM ex-post prices are indicative until D+4). A longer settlement period for Balancing could therefore be appropriate, with the introduction of a weekly settlement allowing for the netting of daily exposures favoured.
	A clearing house would be advantageous as this would allow for cross collateralisation as positions in the different markets could be netted.
Credit Risk Requirements	The ISEM will introduce new risk exposures for participants in the form of Day Ahead and Intraday markets that are financially firm.
	The current policy of socialising bad debts across all participants could result in a 'moral hazard' in ISEM where participants that get forecasts wrong are exposed to large imbalance payments that are socialised.
	Shorter settlement timeframes in the ISEM will increase "unknowns unknowns" which could potentially create exposure to bad debts; another reason why socializing bad debt might not be suitable for ISEM
Treatment of VAT	Engagement with the Revenue Commissioners is needed on this area to provide some insight as to how they will view the new market versus current arrangements under SEM.
Shipping (Financial)	This question relates to the structure of the ISEM market operator.
(manetal)	The role of shipping between bidding zones is not a market-facing function and therefore should not impact on participants' day-to-day workings. However, it is important that the function is carried out in the most efficient manner possible. Therefore the pertinent question is how the shipping role can be developed in a way that is best suited to the overall market.
Market Information	There is a dedicated Market Power work stream where market power mitigation measures will be decided on.

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The scope of this aspect of the Market Design should be to ensure that the maximum amount of information can be captured throughout the market timeframes. Decisions on the availability of this information should be taken as part of the Market Power work stream.

Without prejudicing the outcome of the market power work stream it would be prudent to take the approach of replicating existing market data publication at this stage and where possible within the structure of the new market.

For example, bids should continue to be published but as there is no longer a requirement for Commercial Offer Data in the Day Ahead and Intraday markets this can be excluded. Technical offer data from the Balancing market should also be published as it is in the current SEM.

With an ex-ante market there will be a responsibility on participants to inform the market of issues at their facilities. The manner in which this information is posted to/shared with the market should be as straightforward as possible. A centralised process through SEMO would remove the need for every market participant to separately post information and could also provide a central location to view all relevant market information, assisting transparency in the market.