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Jody O'Boyle
Utility Regulator
Queens House
10-18 Queen Street
Belfast BT1 6ED

21st December 2012

Dear Jody O'Boyle,

Re: RES Response to Proposed Decision Paper for Implementation of the European Target Model for the Single Electricity Market.

RES is one of the world's leading renewable energy developers working across the globe to develop, construct and operate projects that contribute to our goal of a sustainable future. We have a portfolio of low-carbon energy technologies and a range of services which together can meet demand from the industrial, public and commercial sectors on whatever scale.

RES has been an established presence at the forefront of the wind energy industry for over three decades. Our core activity is the development, design, construction, financing and operation of wind farm projects worldwide. With a portfolio of more than 5GW constructed and several thousand megawatts under construction and in development, RES continues to play a leading role in what is now the world's fastest growing energy sector. RES has successfully completed projects in Northern Ireland and the Republic of Ireland totalling 241 MW, of this RES currently owns or operates 134 MW. RES is also involved in the dedicated biomass, solar, offshore wind and wave and tidal sector.

RES welcomes the opportunity to respond to the proposed decision paper for implementation of the European (EU) Target Model in the Single Electricity Market (SEM) and hope you take our comments on board.

Implementation

RES wish to be involved going forward in the SEM re-design, particularly the treatment of renewables which we discuss in more detail below. Specifically, we would like to participate in the SEM re-design stakeholder forum and engage with the Commission for Energy Regulation in Ireland (CER) and Utility Regulator in Northern Ireland (UR), the Transmission System Operators (TSOs) and Single Electricity Market Operator (SEMO) on the various Network Codes and development of the Target Model. It is imperative that the market re-design and implementation process is clear, transparent, open and sufficiently informed. Changes need to be thoroughly investigated through industry wide consultations and workshops. To ensure an effective solution is

developed which meets the limited timescales of this project it is vital industry and the SEM Committee, CER and UR work together throughout the re-design process.

RES welcomes the commitment from the SEM Committee that they will continue to ensure the SEM performs well and meets its statutory objectives during the period of transition to the EU Target Model. This is vital as the current effective operation of the SEM should not be compromised to integrate the EU Target Model. The large nature of this market re-design will create a period of uncertainty for market participants and investors, this must be limited and controlled as much as possible. The deadline of 31st December 2016 should be adhered to in order to provide market certainty.

Given the large scale changes which are needed to the SEM to transition to the EU Target Model a 'top-down' approach to re-design is likely to be the most efficient way to co-ordinate the changes in line with the approach which was taken in the original design of the SEM. We also support the utilising of this opportunity to not only ensure compliance in the SEM with the EU Target Model but also developing other requirements and objectives of the SEM e.g. the integration of renewables. Conjoined thinking between the EU Target Model and other regulatory issues for the SEM is important for a coherent and stable market framework.

Interaction with the UK

The SEM Committee need to work with Ofgem on their implementation of the EU Target Model in the GB market. However, reapplication of the BETTA market arrangements should not be adopted in the SEM. We agree with the "findings of the TSOs report and the RA's consultant's review of the dispatch model for the island of Ireland that central dispatch is the optimal means of dispatching the all island system" and that the EU "Target Model implementation does not require a BETTA style market in SEM."

Furthermore, the link between implementation of the EU Target Model and Feed-in Tariffs with Contracts for Difference (FiTs CfD) in Northern Ireland needs to be appropriately considered. FiTs CfD are due to be introduced in Northern Ireland in April 2016, before the EU Target Model is implemented in December 2016. The setting of strike prices and designating the reference price will be dependent on the SEM market structure. Therefore, the SEM Committee needs to work with DETI to ensure that the two are compatible and CfD strike prices set appropriately. We remain concerned that the two timetables may not be sufficiently aligned and we need to ensure that appropriate mechanisms are in place to ensure the continuation of renewables investment in Northern Ireland.

Market Arrangements: Central Dispatch

The decision by the SEM Committee to retain central dispatch in the SEM is welcome. Central dispatch will ensure security of supply, effective management of intermittent renewable energy generation and continue power price and balancing cost transparency on the island of Ireland. Furthermore, under central dispatch in the SEM, interconnection capacity could be reserved for renewable generation. We support the positive impact market coupling could have on enabling intermittent generators to export power rather than being subject to curtailment.

As stated in the decision paper: "market power mitigation would be problematic under self dispatch". Therefore, we welcome the SEM Committee decision that there will "continue to be

market power mitigation measures in the SEM” and we look forward to seeing further details on this. Furthermore, central dispatch should be retained to ensure effective competition, liquidity and access to market. It is also essential that the re-designed market facilitates access to the market by all potential market participants including independents.

Market Arrangements: Renewables

The SEM Committee principle statutory objective “to promote the use of energy from renewable sources” should certainly continue as proposed in the decision document. Furthermore, we support the SEM Committee’s recommendation for high level principles for the market:

“**vii. Environmental** while a market cannot be designed specifically around renewable generation, the selected wholesale market design should promote renewable energy sources and facilitate government targets for renewables.”

We welcome the SEM Committee decision to adhere to an “absolute” interpretation of priority dispatch as defined in Article 16(2)(c) from the Renewable Energy Directive:

“whereby economic factors are taken into account only in exceptional situations and only where this can be done in a manner that does not threaten the delivery of renewables targets”.

The next phase of detailed design should explicitly outline how priority dispatch for renewable generation will be facilitated. The legislation clearly states that renewable energy should receive priority. The following section of the clause from which the quote was taken further reinforces this point, it states:

“Member States shall ensure that appropriate grid and market-related operational measures are taken in order to minimise the curtailment of electricity produced from renewable energy sources. If significant measures are taken to curtail the renewable energy sources in order to guarantee the security of the national electricity system and security of energy supply, Member States shall ensure that the responsible system operators report to the competent regulatory authority on those measures and indicate which corrective measures they intend to take in order to prevent inappropriate curtailments.”

We support the SEM Committee decision “that changes to the SEM High Level Design should promote, where appropriate, the use of energy from renewable energy sources, as set out in legislation.” Although, we are concerned by the inclusion of “where appropriate”. This sets an alarming loophole to the intention of the whole decision and should be removed. We recognise that there are specific situations where it is not “appropriate” to prioritise renewable dispatch, such as safety concerns, and these should be outlined explicitly. It is imperative that the ability to achieve the renewable energy targets as committed to by Departments in both Ireland and Northern Ireland are considered in the development of any re-design of the SEM.

It is currently unclear how central dispatch will operate with intra-day continuous trading. The risk posed to the SEM of introducing intra-day continuous trading needs to be thoroughly investigated; in particular the risk to renewables. It is important changes are not introduced for the sake of compliance with the EU Target Model if there are significant negative consequences for the SEM. In the case of intra-day continuous trading in particular there is a need to be mindful of unintended consequences.

The introduction of intra-day continuous trading arrangements needs to consider renewables, particularly intermittent renewables. The decision paper states that:

“Currently in the SEM, there is no issue with the accuracy of the availability profiles of wind generators as actual availability values are used to calculate ex post prices. Moving to market arrangements where ex ante prices and quantities at the day ahead and intraday stages are firm, as mandated by the Target Model, will require the use of forecast information at both the day ahead and intraday stages.”

The proposed introduction of intra-day continuous trading in the SEM and the balancing risk that this would introduce is likely to be particularly damaging to the route to market for independent renewable generation. Unlike the current SEM structure, in a market with balancing risk independent generators will be unable to secure financing without having a third party manage the balancing risk through a Power Purchase Agreement (PPA) contract. The PPA contract would transfer the forecasting of generation to the PPA off-taker, along with the responsibility for forecasting and trading the power.

As the PPA needs to cover the duration of the debt term (typically 15 years) and transfer balancing risk away from the project during that period the financiers will only accept PPAs with parties that have a secure credit rating (bbb+). This provides a limited pool of companies able to offer these PPAs and the attached discounts appear to be very high compared to the current day cost of balancing. This was highlighted in the UK in DECC's Call for Evidence on barriers to securing long-term contracts for independent renewable generation investment¹.

The SEM Committee should take note of Ofgem's proposal to improve the treatment of intermittent generation in the GB market as part of their Electricity Balancing Significant Code Review (SCR). Ofgem consulted on introducing alternative arrangements for renewables in the GB market². Their rationale for implementing alternative arrangements stemmed from the potential for intermittent renewable energy generation to be managed more efficiently centrally. We principally supported the option put forward by Ofgem of the SO taking responsibility for variations in generation after gate closure. This option would not only benefit intermittent renewable energy generators but also benefit the whole system as it would facilitate more effective system balancing by the System Operator (SO).

In GB we believe that the SO is the best entity to manage aggregation and balancing of intermittent renewable generation. Given our experience of PPAs in the GB market we have been citing the SEM as an example of good practice and encouraging Ofgem to replicate the SEMs approach, it would be disheartening if the SEM then moved closer to the GB market.

The SEM Committee's proposed decision paper suggests the following approaches to the balancing arrangements of intermittent renewables imbalance which we have critiqued below:

- **Generator pays** – Charging the generators as individual plant for the cost of balancing is a particularly inefficient and costly approach, as the total system imbalance cost will be significantly lower than the sum of the individual plant imbalances. As a result, if individual plants are subject to an imbalance cost, then it will artificially inflate the cost of non-dispatchable plant relative to dispatchable plant. Furthermore, as discussed above we would not manage the forecasting of our generation it would be handled by our PPA off-taker,

¹ DECC, July 2012, http://www.decc.gov.uk/en/content/cms/consultations/call_ren_inves/call_ren_inves.aspx

² Electricity Balancing Significant Code Review (SCR) – Initial Consultation, Ofgem, August 2012, [http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?file=Electricity Balancing SCR initial consultation.pdf&refer=Markets/WhIMkts/CompandEff/electricity-balancing-scr](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?file=Electricity%20Balancing%20SCR%20initial%20consultation.pdf&refer=Markets/WhIMkts/CompandEff/electricity-balancing-scr)

therefore the PPA off-taker would be responsible for forecasting and trading accurately. In the GB market the cost of the PPA appears to be increasingly disconnected to the cost of balancing and any benefits or gains from forecast improvements are captured by the PPA provider. Furthermore, significant changes to the trading arrangements will trigger change in law clauses and in all likelihood re-open existing PPA contracts.

- **Central Aggregator** – this is our preferred solution of those proposed but who will provide this role needs to be defined. Central aggregation would bring benefits including efficiencies of scale but it is almost identical to the current pool system arrangements in place for all generation. The largest benefit of central aggregation is clear indication of the balancing cost of intermittent renewable generators which can then be fairly reflected in PPA agreements and CfD strike prices (for those generators in Northern Ireland).
- **Intermediate approaches** - the example proposed here to allow a tolerance zone of forecast output will not facilitate accurate imbalance settlement. Under this approach the difference will have to be recovered from other market participants. However, we welcome seeing more intermediate approaches being put forward.

Market Arrangements: Curtailment

It is stated in the proposed decision paper that:

“The SEM Committee has decided that that its decision on the Treatment of Curtailment in Tie Break Situations will also apply in a re-designed SEM and this will be taken into account in its decision.”

Although we are as eager as the SEM committee to avoid re-opening this issue, changing the treatment of curtailment in a tie break situation may be needed as the market is re-designed and should not be ruled out at this stage.

Yours sincerely,



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