APPENDIX A RESPONSE TEMPLATE

SUMMARY INFORMATION

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Type of Stakeholder	Representative Association
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General Comments

IWEA welcomes the opportunity to respond to the SEM-16-075 I-SEM ETA Trading and Settlement Code Amendments Consultation and would like to use this section to highlight some of the main concerns for IWEA and the wind industry in relation to the T&SC. The move to a market with ex-ante trading brings a number of challenges for wind generation, including forecast error, which means that the Balancing Market must not place additional risk on wind energy projects. There are also significant cost implications with costs associated with the different market timeframes and the likely new requirements around credit cover. It is important that these costs are not of such a scale that they will unnecessarily impact the efficient operation of the market or preclude particular types of generation from participating in the ex-ante markets. Renewable generation will make up 40% of our electricity mix in 2020, and wind energy will form a significant part of the market, therefore the market needs to work for renewables.

There are a number of factors which will impact the market and its operation, and the impact of which is still unclear. These include:

- BREXIT: We are still uncertain of the implications of BREXIT on I-SEM, and the comments throughout this consultation do not address the uncertainties which arise from this.
- Interaction of REFIT and I-SEM: We are still awaiting clarity from DCCAE in relation to the impact of REFIT and I-SEM. This will have significant implications for wind in this market.

Our comments below are written in the context of these uncertainties, and highlight the areas of main concern for IWEA members.

1. **Aggregation**

The I-SEM High Level Design decision includes a provision for the aggregation of renewable energy in the ex-ante market timeframes. Aggregation of renewables in the ex-ante timeframe will provide a

number of significant benefits to the market and these benefits need to be realised in the I-SEM design. It should be noted that it is in the interest of **all** market participants, and not just renewable participants, to allow for aggregation of renewables as this will lead to more efficient trading for all.

Benefits of Aggregation

- Aggregation provides more tradable volumes and will lead to more efficient market outcomes. It is likely that wind generation will want to update its position in the intra-day markets based on updated forecasts, however in many cases this change is likely to constitute a small volume if it were to be on a unit basis. By enabling aggregation, larger volumes can be traded which are more likely to be matched. There is also a possibility that there will be a limit to the size of a trade in the ex-ante markets, and if trading was to be carried out on a unit basis, this limit may not be reached and the units would not be in a position to manage their imbalance. This would then lead to lower participation in the ex-ante markets due to increased risk, and less efficient market operation. The absence of aggregation would lead to distorted participation and impact the entire market.
- Aggregation allows for economy of scale. It is important to recognise that the increased trading requirement will add significant cost to generators. This is particularly the case for wind generation where the forecast changes as real time approaches. By enabling portfolio trading or aggregation the burden of trading is significantly reduced, both for market participants and for the market systems.
- It should be noted that any additional costs which are built into the market systems will ultimately end up being covered by the consumer. Any new support scheme introduced for renewables is likely to be an auction based competition. The costs to generators will be included in the auction bids and therefore will be included in the support schemes going forward. We would urge that the costs within the market can be minimised wherever possible to ensure that the cost to consumers can be minimised.
- Aggregation allows for reduced administration in the ex-ante markets, through a reduction in transactions, registration requirements, data submission and data processing. This should also result in reduced registration and participation fees, which will pass through to consumers in the long run.

Principles

IWEA believes that the following principles are fundamental for aggregation in I-SEM:

- Aggregation needs to allow for portfolio trades to take place in the ex-ante markets which are related to physical assets. This is because compensation for constraint (and curtailment while it is available) is only to be paid for energy which has been traded ex-ante, therefore the trades of the aggregator need to be recognised as corresponding to physical generation.
- The ex-ante trades need to be capable of being submitted in an aggregated format in order to gain the benefits of aggregation outlined above.
- All participants should have the option to aggregate renewable generation, however there should be no obligation to trade on an aggregated basis.
- There should be no limit to the number of portfolios that a participant can have. There should be flexibility to trade differently for different types of projects that might have different financial arrangements.

Potential Mechanisms

Unit based bidding will make it more difficult to balance wind portfolios. Traders will have to individually post intraday bids/offers for each farm increasing exposure to volatile imbalance profiles. This will be particularly acute across a portfolio of supplier-lite projects.

There needs to be a mechanism in place which allows the aggregated trades in the ex-ante markets to feed through to imbalance settlement on a unit basis while ensuring that constraint and curtailment payments can be maintained. This could be done by assigning generation units to an aggregated portfolio (perhaps a unit in its own right) for trading in the ex-ante timeframes.

Assetless Units

One solution which has been discussed is that wind units could be proxy traded through an assetless unit in the ex-ante market with the physical units spilling into the Balancing Market. The volumes would wash through the single imbalance price. While this solution would reduce the administrative and financial burdens there are other issues with it:

- The ex-ante traded volumes need to be associated with the units for the purpose of compensation of constraint and/or curtailment.
- PUG (premium for under generation)/DOG (discount for over generation) and Information Imbalance Charges – These would apply to BM pay-outs and reduce revenue for the windfarms
- Windfarms participating in the CRM will not have their ex-ante trades recorded to satisfy the RO contracted volumes

Possible Structure

- An assetless unit could be registered which can trade on behalf of windfarm portfolio.
- The assetless unit volumes would need to be mapped to generator unit volumes in the Balancing Market (to overcome issues highlighted above).

The mapping could be carried out on a relatively simple basis where the portfolio ex ante trades are apportioned on a pro-rata basis to the units which make up that portfolio. This could look something like the following:

$$QEX = Available\ MWh\ x\ \frac{unit\ nameplate\ capacity\ (MW)}{portfolio\ nameplate\ capacity\ (MW)}$$

It is not appropriate to say that aggregation has to fit into the mechanisms already in place – if there is a need for extra code to ensure this can be accommodated then this needs to be done. IWEA notes that this is a fundamental component of the market design and needs to be in place for market Go-Live if wind generation (and other renewable generation) is to participate in the market.

2. Imbalance Pricing

IWEA still has concerns in relation to Imbalance Pricing in I-SEM. Due to forecast error wind generation is likely to be more exposed to Imbalance Pricing than other forms of generation.

During the detailed rules development a number of concerns were raised in relation to the Imbalance Pricing and concerns were raised as to the potential volatility of the pricing. A commitment was provided that, if the pricing was not as expected, it could be addressed. IWEA believes it is essential that this review and assessment is built into the transitional arrangements for I-SEM to ensure that the pricing is as intended. This is particularly important given the lack of data currently available.

IWEA also notes that back up proposals for Imbalance Pricing were developed. These could also be included in the Trading and Settlement Code to ensure that, in the event a back-up price is required, that this is available, without needing to go through the Modifications Process.

PAR (Price Averaging Reference)

The level at which the PAR is set will have a significant impact on the Imbalance Price in I-SEM. Any changes to this would require a detailed impact assessment and require stakeholder consultation. This consultation process needs to be outlined within the Trading and Settlement Code. There are a number of other parameters which should also require consultation before they can be change.

3. Compensation for curtailment

The Winter Package from the European Commission published in November 2016 outlines that curtailment of renewable generation shall be compensated. While this regulation is not yet fully in place, there is a clear direction outlined here which needs to be taken into account in the current market design by ensuring that the removal of compensation for curtailment is not included or can easily be removed. IWEA has always maintained that the removal of compensation for curtailment is not appropriate, and the Winter Package is reinforcing this position.

4. Administered Scarcity Pricing

IWEA has concerns that wind generation is the most exposed of all market participants to the ASP. For conventional generation participating in the CRM the stop loss limit is designed to ensure the loss is limited. Suppliers are also protected through socialisation arrangements.

Wind generation is unlikely to participate in the CRM given the higher risk associated with not generating at the time the CRM is called, and therefore not earning the high price. For balance responsible wind farms the risk is that they generate less than they forecast and have to pay out this price for forecast error. As a result wind generation has an uncapped exposure to ASP which is not appropriate.

5. Cross default

In the absence of cross-collateralisation between markets it does not seem appropriate that there would be cross default. IWEA is of the view that once you have credit cover in the balancing market, you should be able to participate, as default in the ex-ante market has to be catered for through its own credit cover arrangements.

6. Emerging Technologies

It is important to ensure that the Trading and Settlement Code allows for new technologies to enter the market. There are a number of new technologies or project structures which should be taken into consideration in the market, e.g. solar generation, hybrid projects, storage facilities and other emerging technologies.

7. Supplier Base Charging

IWEA acknowledges that a separate consultation has taken place on Supplier Base Charging, however would remind the RAs that the decision coming from that will need to feed into the present consultation. We remain of the view that the gross demand approach is entirely inappropriate.

I-SEM TSC COMMENTS

ID	I-SEM TSC Reference	Short Title	Commentary / Explanation	Suggested Drafting Change to the TSC	Relevant Cross-Reference for any impacted section
2		B.7.2.2	No unit type for solar or hybrid connections or other unit types		Glossary Probably has wide implications for the code

ID	I-SEM TSC Reference	Short Title	Commentary / Explanation	Suggested Drafting Change to the TSC	Relevant Cross-Reference for any impacted section
3		B.11.1.2	Not sure if the wording here is clear	The Intermediary must be a Party to the Code. ~~provided that an~~ An Applicant may submit an application to register Units as an Intermediary prior to becoming a Party ~~except that~~however registration of Generator Units shall not take effect until the Applicant has become a Party. For the purposes of the appointment of an Intermediary under the Code, the person appointing the Intermediary is not required to be a Party to the Code.	Should not impact any other section
4		B.17.1.1	It should be clear that it is Modifications **to this code**	Modifications to this code	Should not impact any other section
5		B.17.2.1	(b) provide views to the Market Operator in relation to plans for the pursuit of any Unsecured Bad Debt in accordance with paragraph G.2.7.8. Not sure why this has been added – doesn't really seem appropriate		

ID	I-SEM TSC Reference	Short Title	Commentary / Explanation	Suggested Drafting Change to the TSC	Relevant Cross-Reference for any impacted section
6		B.18.3.1	(o) the Party has been suspended under the Capacity Market Code or under the NEMO Rules. If you are covered in the BM then should this matter?	Suggest removal	
7					
8					
9					
10					

NB please add extra rows as needed.