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**L I M I T E D**

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Ref: TEL/PH/17/037

28<sup>th</sup> February 2017

**RE: Response to Interim Intraday Products Proposal for I-SEM Go-Live**

Dear Sirs,

Tynagh Energy Limited (TEL) welcomes the opportunity to respond to this Interim Intraday Products Proposal for I-SEM Go-Live discussion paper. TEL believe we are in a position to provide insightful feedback to this discussion paper due to our extensive involvement in the EUPHEMIA working group and the significant overlap between the Day-ahead Market (DAM) and Intraday Market (IDM) auctions.

The Irish power market will be dominated by wind in I-SEM. In order for the markets to work as described wind needs to be facilitated as much as possible. Wind forecast error will drive liquidity in the IDM, but this liquidity is likely to gather more at the IDM auctions than in the Intraday continuous. In the event of the forecast error being greater than 400MW for four hours there will be a significant unit commitment issue. Under the proposals if a thermal plant is off, it will need to bid in its start-up costs into each hour. This will see higher prices and will drive wind generators away from the Intraday auctions and subsequently the DAM.

TEL do not agree with only allowing Simple Bids in the IDM Auctions as we disagree (detailed below) with the main reasons for this proposal i.e.

- *the liquidity for each intraday auction is currently unclear given the predicted high level of participant in the DAM and multiple routes to market (i.e. multiple auctions and continuous market);*
- *I-SEM trialling of EUPHEMIA showed volatile pricing outcomes where block orders were used without sufficient liquidity of orders using other products also being present in the market; and*
- *the majority of unit commitment is expected to be resolved in the DAM, and the IDM segments are intended to adjust positions closer to real time, there is less of a need for complex representation of unit characteristics.*

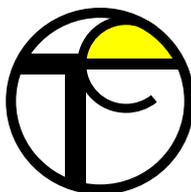
Liquidity in the IDM auctions

TEL are of the opinion that limiting the bid types available to generators to simple bids only will further reduce liquidity in the IDM auctions. For generators who do not receive a DAM schedule, the lack of bid types (e.g. complex and linked block) that take account plant characteristics i.e.

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minimum up time, will restrict them participating in the IDM auctions due to significant scheduling risks.

TEL believe the inability to include plant characteristics (minimum up time) into their bids will force plants without a DAM commitment to include all of their start-up costs in each hour. This will result push up prices in the IDM auction.

#### EUPHEMIA volatile pricing outcomes

TEL would be extremely hesitant against making assumptions on the pricing outcomes of the IDM auctions from the EUPHEMIA working group DAM results. It should be remembered that:

- a) the primary goal of the EUPHEMIA trials was for market participants and SEMO to gain first-hand experience in the formation of orders and related strategies for EUPHEMIA,
- b) the EUPHEMIA trial was a work in progress where the working group was continually remedying errors in the dataset and it was only near the end of the trials were the dataset were relatively error free, and
- c) there was relatively little price volatility in the unscripted trials, which was representative of real market bidding, compared to the scripted trials.

#### Majority of unit commitment in DAM

In terms of unit commitment in the IDM, TEL do not agree with the assumption that “*the majority of unit commitment is expected to be resolved in the DAM, and the IDM segments are intended to adjust positions closer to real time*”. The figure below illustrates the wind forecast error on the 14/02/2017. The yellow line (08:45 on 13/02) would have been the wind forecast to be used in the DAM at 11:00 on 13/02. Assuming wind submits 100% forecasted into the DAM as a price taker, the yellow line will be the DAM schedule for wind generators. At 12:44 on the 13/02 new wind forecasts are released and there isn't much change. Subsequently, there wouldn't be a unit commitment decision to be made in the IDM at 14:00 on 13/02. However, by 08:00 on the 14/02 when the next IDM auction is held the wind forecast has changed significantly, as shown in the figure below.

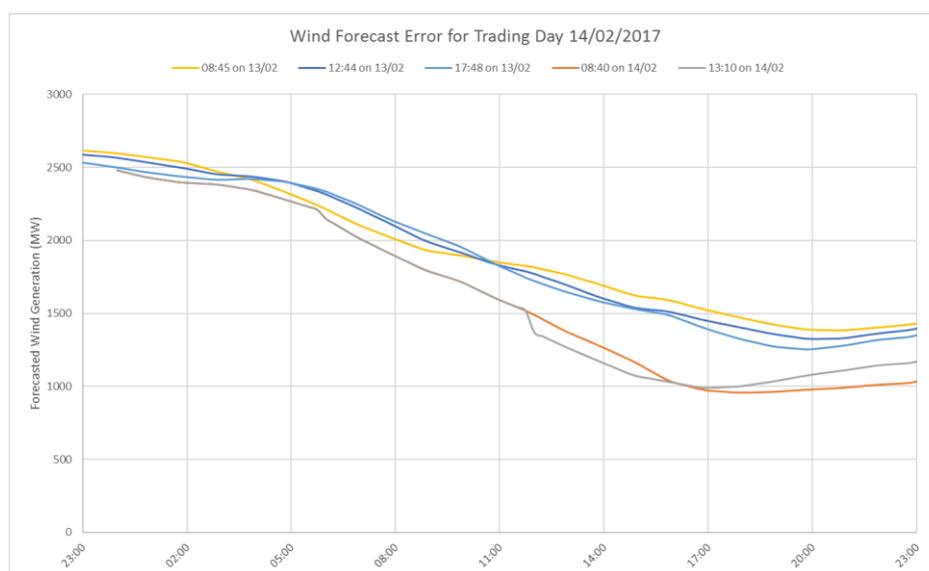
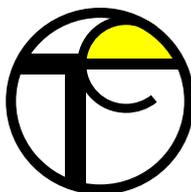
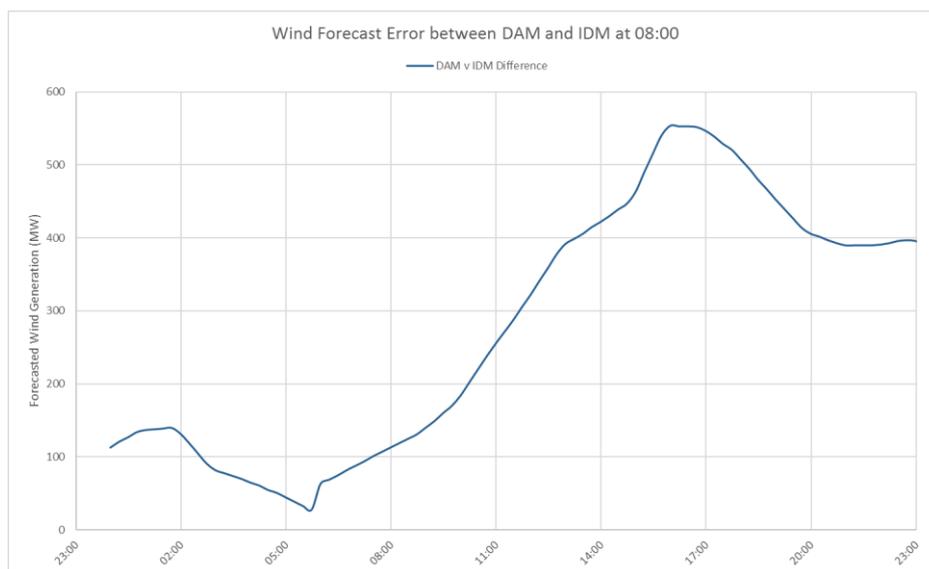


Figure 1 Wind Forecasts for 14/02/2017



The figure below illustrates the difference between the forecasted wind submitted in the DAM held at 11:00 on the 13/02 and the IDM held at 08:00 on the 14/02. From 13:00 to 23:00, at least an extra 400 MW of generation is required. It would be highly unlikely that the units committed in the DAM schedule will be able to provide this extra requirement. Therefore, the IDM auction should be the next market to facilitate the requirement for unit commitment.



*Figure 2 Wind Forecast difference between DAM and IDM (08:00)*

TEL believe that the IDM continuous as well as the IDM auction will be the markets used to adjust positions closer to real time. However, unit commitment decisions will still have to be made in the IDM timeframe and the IDM auction is the most suitable market. The assumption that the majority of unit commitment decisions will be made in the DAM and there is no need for Block or Complex bid types in the IDM auction is incorrect.

If simple bids are the only bid type available in the IDM auction, TEL would have to take on significant scheduling risk when participating in the IDM auction. TEL believe the proposal for simple bids only in the IDM will significantly reduce liquidity in the IDM, drive prices higher and force participants to become less balancing responsible and spill into the balancing market. TEL believe the success of the IDM is reliant on the flexibility available to participants through the IDM products. The IDM auction should be developed with the full range of products available e.g. complex orders, linked block orders, simple orders, block orders and exclusive group orders.

Should you have any queries on our comments, please do not hesitate to contact me.

Yours sincerely,

**Paraic Higgins**  
I-SEM Analyst