Dear Utility Regulator and Commission for Energy Regulation,

Lumcloon Energy Limited (LEL), new entrant developer of a new 300MW flexible CCGT near Tullamore Co. Offaly and a parallel project to develop utility scale battery storage, both with a view to providing DS3 services, welcomes the opportunity to respond to the SEM Committee consultation “Energy Trading Arrangements Trading and Settlement Code” (SEM-16-075).

LEL has examined the overall detail\(^1\) of the I-SEM design, including in this specific instance the balancing market price formation along with the fact that the ex-ante markets are the exclusive route to a scheduled position for non-priority dispatch generation. It has been an observer at the Rules Working Group.

LEL acknowledges the detailed and considerable work to date on this programme, and the time, effort, skill and patience of the entire project team is to be commended.

We question, however, whether our understanding of the objectives of the I-SEM High Level Design (as set out in quantitative terms in the Impact Assessment) will be met with the implementation detail as presented. We understood that the I-SEM High Level Design implicitly delivered unconstrained market prices – i.e. an unconstrained market price somewhat similar to today – in the Day-Ahead Market and the Intraday Market. As a corollary to this, presumably the most efficient generation will meet that market demand and earn energy market rent. The balancing market should set a price related to the energy actions required to balance

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\(^1\) Many items of detail – and indeed implicit policy – have emerged throughout the entire market design, ranging from the ongoing work in Forwards and Liquidity, Market Power, the Capacity Remuneration Mechanism (CRM), the Balancing Market Arrangements (under consultation here), and the interaction with the European ex ante market trading timeframes. Alongside this work is the DS3 Programme. Outside of the SEM Committee competences, there is also work yet to begin (or be shared in the public domain) in relation to the interaction of jurisdictional connection policy (specifically bonding / stage payments) with the auction designs of DS3 and CRM, and also the interaction of subsidised generation with the new energy and capacity arrangements.
the market, sending a signal for balance responsibility.

We see no quantitative evidence the above basic features which we have assumed will arise, and can make reasoned arguments why we believe these basic outcomes will not occur.

Qualitatively we are seeing a very different market design emerge, with different signals for generation investment arising from materially new influences on price formation across all market timeframes. Our response to the CRM Parameters consultation deals with similar issues arising in the Capacity Mechanism.

- **We believe the incentives set by the market lead to constrained generation setting the prices in ex ante timeframes, rising prices for customers and setting inefficient interconnector flows.**

  The balancing market price is set by the marginal MW in constrained dispatch under the proposed SEM T&SC. If unconstrained generation sets the price in the day-ahead market and the day-ahead market serves a broadly correct amount of demand, it is our understanding that the balancing market price may materially deviate from the day-ahead price with non-energy physical constraints on the system. This drives prices higher in the balancing market the more constraints there are. This incentivises purchases of energy in the ex-ante timeframes, rising prices in those markets until they equalise with the balancing market price.

  By our analysis, we believe that the market design sends the signal for the dispatched stack of generation to set the prices in ex ante timeframes, not the unconstrained stack as currently. In a highly-constrained market such as the SEM, this results in a much-altered pricing outcome for consumers.

- **We believe that generation which are constrained on by the TSO implicitly have a “back-door subsidy” to outcompete more efficient generation within the “unconstrained” ex-ante markets.**

  If a generator is constrained on out-of-merit to meet an operational security constraint through a balancing market action, their constrained on position allows them to continue to offer into the day-ahead market and intraday market with the advantage of not having to incur a Start-Up cost (unlike more efficient competitors which may have been turned off). Again, this appears to set the signal that “constraint is king” and constrained generators have a natural advantage over their other competitors. This creates a fundamental change in the market merit order for generation.

- **If our hypothesis is correct, investment signals are linked intrinsically to where you are located, the constraints in that location and one’s expectation of TSO’s dispatch and network development to resolve those issues.**

  In LEL’s opinion, this is a market which is very different to that envisaged in the High Level Design.

- **Even for generators which are in a favourable physical dispatch position, it is questionable whether the resulting energy market signals are investible.**

  We believe that the short-term pricing may be difficult to predict (due to the calculation of the imbalance price every five minutes, and averaging into a half-hourly value). Longer-term, the investment signals for the market appear to be around the TSOs’ planning for the trade-off between
constrained generation, DS3 operational strategies, and network infrastructure build. It is difficult, therefore, to model market outcomes both in the short term (due to the price setting methodology) and the medium to long-term (reliant as it is on TSO discretion).

There are also no risk management tools within the I-SEM design to manage this risk.

We have a few questions for the SEM Committee that would be useful to answer, so as we understand the intent of the I-SEM (insofar as it deviates from existing SEM policy) beyond compliance with the EU Target Model.

- Is the intent of the I-SEM to drive investment in energy efficient generation within an unconstrained market schedule (which was LEL’s initial understanding of the I-SEM HLD) or generation which is required to be utilised in dispatch outside of energy efficiency reasons (e.g. to resolve a constraint, which is our understanding of the outcome of the design)?
- Should the economic signal for import and export on interconnectors be driven by prices which reflect an unconstrained market merit order in the I-SEM, or a merit order which is higher cost due to the inclusion of constraints in price formation?

We recommend that the SEM Committee test these more detailed objectives before the outcomes of the market trial become apparent, so changes to the market design can be delivered if required.

We specifically – at a high level – request the SEM Committee to review balancing price formation within the I-SEM T&SC both from the above policy perspective, and the extent to which such prices can be reasonably taken as an actionable signal by market participants (given the five-minute price formation, averaged into a single market price) to balance the market and be balance responsible.

This response is not confidential and may be published in full.

Yours faithfully,

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Nigel Reams
Director
Lumcloon Energy Ltd.