DISCUSSION PAPER AND CALL FOR EVIDENCE ON SCARCITY PRICING AND DEMAND RESPONSE IN THE SEM SEM-21-042

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INTRODUCTION

SSE welcomes the opportunity to comment on the *"Discussion Paper and Call for Evidence on Scarcity Pricing and Demand Response SEM-21-042"*. For the avoidance of doubt, this is a non-confidential response.

WHO WE ARE

At SSE we're proud to make a difference. From small beginnings we've grown to become one of Ireland's largest energy providers, supplying green electricity and natural gas to over 700,000 homes and businesses on the island. We are driven by our purpose: to provide energy needed today while building a better world of energy for tomorrow.

Since entering the Irish energy market in 2008 we have invested significantly to grow our business here, with a total economic contribution of €3.8bn to Ireland's economy over the past five years. We own and operate 890MW of onshore wind capacity across the island (including Northern Ireland's largest, Slieve Kirk Wind Park), offsetting over 700,000 tonnes in carbon emissions annually. Our portfolio includes Ireland's largest onshore wind farm, the 174MW Galway Wind Park, which was jointly developed with Coillte. We also own and operate the Great Island Power Station, Ireland's newest gas station and a strategic asset for Ireland's security of electricity supply.

As a leading developer of offshore wind energy in Great Britain, we believe offshore wind has the potential to transform Ireland's response to climate change. SSE is currently progressing the development of a consented offshore windfarm off the coast of Co. Wicklow - Arklow Bank Wind Park Phase 2. We also have plans to progress projects at Braymore Point and in the Celtic Sea.

SSE are proud to be a Principal Partner for COP26 – the 26th United Nations Climate Change Conference of the Parties – where world leaders will be seeking a more ambitious climate change agreement. We look forward to continuing to work with the UK government and other stakeholders to support the delivery of a successful and impactful COP in Glasgow next November.

SSE RESPONSE

SSE has directly contributed to the WEI and EAI responses and we support the positions taken in both of these responses. We have included some brief additional comments below which we think are relevant to share.

ADJUSTMENT OF ADMINISTERED SCARCITY PRICE

We note that the premise for adjustment to this parameter is the assertion that there has never been a true scarcity price event that has triggered to the level of the Administered Scarcity Price. SEM documentation[1], and documentation published recently regarding market reform of the CRM[2], indicate that the ASP should trigger at a time of reserve scarcity[3]. There has as yet, not been any occasion under the new SEM, when the reserve requirement has been exhausted to a point that would warrant the triggering of the ASP. It is also clear from documentation, that the other likely trigger for the ASP is where load shedding becomes required. This is additionally not a scenario we have faced to date and therefore it is expected that ASP should not have triggered. We find it confusing that the premise is that the ASP appears not to be fit for purpose in not having been triggered.

[1] PowerPoint Presentation (sem-o.com)
[2] market_reform_plan_ireland.pdf (europa.eu)
[3] Reserve scarcity is where the volume of short-term reserves actually being provided is less than the volume required for them

We acknowledge that in the context of the Relative Scarcity Price (RSP), this should be at an RA approved Scarcity Curve on the basis that it is at a suitable level to reflect the price of reserve scarcity. Essentially, in proposing that the RSP should be set at or around the RO Strike Price, the RAs are signalling this as the new appropriate level beyond which we would exhaust reserve requirements. We have yet to come close to exhausting our reserve requirements and triggering reserve scarcity at a level around the RO Strike Price. Therefore, setting the curve at or around this level is an inappropriate trigger to reflect reserve scarcity.

We note that the ASP measure is intended to address the lack of demand side response at times of scarcity. The adjustment to such a significant parameter simply to encourage demand side behaviour change is unacceptable. The clear lack of demand responsiveness during high prices or negative prices since the start of the new market should indicate that a behaviour change through prices seems an unlikely effect of this adjustment. The effect that is certain is the disproportionate exposure to contracted units of frequent ASP events, and as we have seen over the last 4 years, at times when clearly there was no reserve scarcity. Such a proposal will unfairly penalise units which are not despatched in the market, causing financial strain to these units, based on events that cannot be accurately expected or forecast, that may create an exit signal.

The setting of clear market triggers for changes to behaviour cannot be a matter of adjustment of a single parameter. There are many possible reasons or risks that could explain lack of demand side responsiveness during specific periods where the RAs would prefer greater activity. One example mentioned in the EAI response are the additional financial risks that units face such as RO payment exposure and recoverable make whole payments. Other risks are associated with the one-sided effect of this proposal. The adjustment to RSP would be expected to motivate increased selling but is very likely to not be matched by the same degree of buying behaviour. There is no way for a generator to know whether their position will be matched, which will increase the risk to units of not being despatched despite a traded position, because they cannot guarantee purchase.

If the RAs are seeking for any units to reflect scarcity in higher prices, they must consider the full suite of risks and exposure, design and market limitations, faced by a unit in seeking to set their bid at such a level. We would also agree with the EAI; secondary trading is not sufficiently developed to mitigate the risks created by an adjustment to the ASP. The overall level of the ASP presently, recognises the lack of secondary trading, which was agreed to be a Day 2 issue for implementation post-SEM go-live.

On the matter of design and market limitations, it should not be forgotten that the RO Strike Price was also included in the market as part of its design. Where usually a market chooses scarcity pricing parameters, or a Capacity Market; the I-SEM project implemented both. There is therefore no incentive or clear reason why a contracted unit (since all units must participate in the Capacity Market), would risk triggering the RO Strike Price simply to seek to earn scarcity prices. We appreciate that what the RAs are seeking to do is to encourage scarcity pricing to trigger behaviour change, but without realising the actual design and market limitations leading to the rarity of such an activity by a market participant. Furthermore, it should be noted that the rarity of ASP events being triggered is a normal feature of several other markets, such as in Great Britain. The original premise of this consultation is thus also unclear given experience in other jurisdictions.

Lastly, it is important to note that the ability to earn scarcity rent is extremely limited in the SEM due to the nature of the capacity market design, as well as the setting of the actual price floor at the RO Strike Price, before ASP is reached. We appreciate that this is seeking to be remedied via the RSP adjustment proposed. However, the setting of the RSP around the RO Strike Price underestimates the value of reserve scarcity and undermines the signal seeking to procure up to the reserve requirement. The RO Strike Price effectively signals the need for reserve and the point at which any unit contracted under the capacity market has an incentive to commit capacity (if available) to manage their reliability option exposure. Introducing scarcity pricing below or above this level undermines this procurement signal and also sets the initial value of scarcity at a different level to the reserve being procured to meet it. This is even before the same reserve requirement has been exhausted to a level that we would expect reserve scarcity to trigger. The effect therefore of this approach is to set these two signals in conflict with each other.

INTENDED DEMAND SIDE RESPONSIVENESS

We agree with the EAI and WEI response that the intended outcome is highly unlikely, i.e. that demand side response will increase its activity when this proposal is implemented. We are deeply concerned with the simplistic approach taken to seek to encourage this behaviour change. Demand Side Response typically includes either contracted units behind the DSU, or else interruptible contracts struck with final customers where DSUs can flexibly adjust their demand at certain times and under certain agreed contractual terms.

The approach to adjusting regulatory levers would be useful if it were directly to affect the actual parties with a say in how their demand reacts. However, in significant instances, this is not possible since the final customer with the interruptible contract is the one who dictates as per the terms of their contract, how their demand should react to market signals. For DSR that involves contracted units awarded guaranteed revenue through the CRM, it is unclear what expected incentive could induce them to price to reflect scarcity, and as mentioned, we are uncomfortable with the suggestion of a lower trigger for scarcity below the RO Strike Price. The proposal clearly cannot directly impact final customers holding interruptible contracts and is unlikely to encourage behaviour change for contracted units. Therefore, the proposal is very clearly likely to have a negative impact with little likelihood of resulting in the expected outcome.

We would encourage the RAs to carefully consider the unintended consequences and financial exposure of this proposal on those units who would be otherwise best placed to meet whatever system needs arise during the winter. Especially, in awareness of the number of RO events we have had throughout the year where it has not immediately been related to scarcity. To penalise those units who can be available in the market, to essentially administer controlled demand reduction, is not what the CRM was designed to do. Furthermore, given our centrally dispatched system, the measures open to the TSO should be considered first as units cannot position themselves away from significant exposure in this market.

ADVANCED NOTICE PRIOR TO AMBER ALERTS

The paper asks for feedback on whether there would be merit in greater advanced notice of system issues. We would agree with the WEI and EAI in strongly supporting advance notice prior to Amber Alerts as a separate activity to the proposed adjustment to the ASP. We have requested greater advance notice via communications with SEMO, so we would whole-heartedly support implementation of this measure. In

recent periods where balancing actions above the RO Strike Price have been taken, these have primarily been cross-border actions taken by the TSO. If there is a clear requirement for additional energy or plant availability within the all-island market to provide the TSO with alternatives, this information should be signalled to participants as soon as possible.