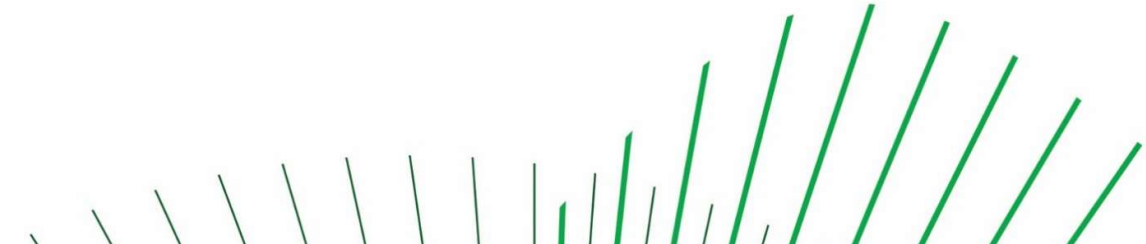
Bord na Móna

Administered Scarcity Pricing Review
SEM 23 047

Bord na Móna Response

22nd September 2023



1 Response

Introduction

Bord na Móna (**BnM**) welcomes the opportunity to respond to this SEM Consultation on Administered Scarcity Pricing (ASP) Review.

While the consultation paper invites views on the proposed three options as well as an indication of preference, we welcome foremost the opportunity to provide important views regarding the fundamental contents of the paper.

For reasons outlined within this response BnM is unfortunately not in the position to support any of the three proposals.

This is primarily because the paper does not make it clear what the objective of the proposed change from existing design is hoping to achieve**,** nor does it take into account the impacts of its proposals**.** We do not see evidence of the the need for, and benefit from, change.

Any change to the way ASP trigger is calculated and applied can have significant impact on business models, and ultimately on the Consumer. It is vital that any proposed changes are evaluated by a full benefit study as well as full impact assessment in the first instance on conventional generation, battery storage and perhaps intermittent renewables when their role in providing capacity is better recognised within redesign of the CRM.

1.1 Thrust of Change

It appears that much of the thrust for addressing change to the ASP is driven by the 2022 EY Paper on the Performance of the CRM [1] and what appears to be their concerns about energy provided by demand side units (DSUs), as well as recognition of the localised nature of scarcity.

Also contributing to the perceived need for change is conflation between 'reserve scarcity' and 'system adequacy' and an implicit assumption that conventional generation should be exposed to increased risk on account of RAs concerns about system adequacy/reliability, arising from market dynamics which is not of the generators making, nor which is apparent in the market, as can be seen from the absence of a single scarcity pricing event since the start of ISEM arrangements.

1.2 The Fundamental Issues – High Level

The thrust of the paper appears to not adequately recognise that there can be many reasons for Short Term Scarcity, other than units not turning up and locational constraints.

1.2.1 Lack of Impact Assessment

Regardless of debate on DSUs, what is very clear is that changes as proposed would have a significant impact on Existing Conventional generation, in particular, and New Conventional generation, more broadly.

It is very important that proposed changes, and the need for change, should be evaluated in a holistic context, rather than in a uni-dimensional perspective on DSUs. The reference to 'holistic' should encompass the revenue impact the Capacity, System Services and Energy revenues streams for the full range of technologies and asset types. This evaluation should take into account that many of these streams are under significant re-design resulting from implementation of the Clean Energy Package and towards the achievement of Climate Targets.

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[1] EY Report SEM 22 054A Performance of the SEM CRM
Key areas with scope for improvement
► The reliability option provides insufficient incentives for providers to be available. This is principally due to the failure of the administrative scarcity pricing mechanism to set high prices at times of stress, as well as most stress events occurring on a localised basis.

Notwithstanding lack of evidence of the need for change, any assessment of Options would need to include the full impact of Secondary Trading capability and Scheduling and Dispatch arrangements. It would be totally inappropriate to increase the risk to the participant by introducing any change ahead of implementation of effective Secondary Trading and of the full Schedule and Dispatch workstream. Apart from other technologies, the potential exposure to Battery storage participants, in particular, in relation to non- performance payments is not known at all (short of being capped at the Stop Loss limit). Based on questions at the recent Scheduling and Dispatch update workshop[2] there would be issues arising.

In terms of what is an acceptable potential impact, we totally reject the assertion that generator risk is sufficiently mitigated by being capped at the annual stop loss limit of 1.5 annual capacity payments and 0.5 times per billing period.

We do not believe that EYs observations should be, or were intended to prompt a consultation such as this, without a full impact assessment (positive and negative) as described in the introduction.

Increased Collateral Requirements

At a participant level, there is no reference to the Increased Collateral requirements which would be coincident. These are already very sizeable. The Consumer would be less well off as a result of higher collateral requirements, due to the need for the market to pass associated additional costs on to them.

1.2.2 Change is Not Required

The paper indicates that there has not been a true scarcity price event that has triggered to the level of the Administered Scarcity Price since the beginning of I-SEM, despite some 9 system alerts, and then presents a number of options designed to trigger such events.

However, it does not explain the benefit from increasing the number of ASP Scarcity events, nor the associated impacts. Given that we can identify risks to the consumer and potentially to security of supply we are not in a position to support change by favouring any of the three options.

While we acknowledge that ASP is a very important price mechanism in the market to incentivise generation and other services to meet system demand during these times of scarcity we find it confusing that the premise of the proposed change is that the existing ASP design is not fit for purpose in not having been triggered. We do not clearly see the lack of effectiveness of existing arrangements/design.

Market Signals are already Fully Adequate

Furthermore, it is represented that there is insufficient market signal for units to be available and that RO scarcity events caused by prices being greater than the Strike price are few and far between (ie, no one will trigger the RO Strike Price). By saying this, the paper does not recognise that Existing Reliability Obligation arrangements already incentivise availability, firmly incentivising units to 'turn up' to avoid threat of very significant non-performance difference payments. Furthermore, the Reliability Obligation Strike Price is a cap that protects consumers from higher prices.

Reserve Scarcity and Adequacy Scarcity should not be conflated – as mentioned above

Within the paper the RAs set out that there is a difference between reserve scarcity and adequacy scarcity and that one may not be a proxy for the other. From the paper it is apparent that adequacy scarcity is not being attributed to generators not turning up - and that consequently any corrective/change proposals under consideration must be fully evaluated against the negative impact on such conventional plant and to consumers. The impact on battery storage should likewise be prioritised given its increasing presence and growth in the market, as well as the complexity of its inter-dependent revenues across the main revenue streams, capacity, energy and system services.

[2] Scheduling & Dispatch – Industry Workshop; SEMO Team 6th Sept '23

Regarding Adequacy Scarcity, there are a number of underlying fundamental issues

i) the CRM is flawed; Capacity winning at auction is having to terminate for reasons well acknowledged in the EY report; this is what has brought about the need for Emergency Generation – not lack of reliability or availability.
ii) Secondly, the localised nature of scarcity is brought about by the lack of grid infrastructure – the repercussion for which should not sit with the generator.

1.2.3 The Proposals are Flawed

Paper Omits to Recognise Future Market Design within Consultation, as well as Existing Arrangements relating to the RO mechanism

The Consultation appears to be based on a snapshot of the market today. It does not consider the impact of increased Renewables, of EU Reintegration, increased levels of Largest Single Infeed, VOLL, etc. Notably there is no mention of interconnector developments, including the North-South Interconnector, Greenlink 500MW in 2024 and Celtic 700MW in 2026/7. It is well observed that existing Interconnectors linked beyond the Island are shown to be acting counter intuitively, ie, in such a way as would reduce system reserves. Interconnectors have been exporting during times of system tightness (and importing during times of curtailment). The provision of Adequate Reserves needs to fully factor these market dynamics.

The flip side of this behaviour is very high price System Operator to System Operator Interconnector trades. There is no apparent recognition of proposed treatment of these within ASP arrangements in the way that these are flagged out within the treatment of ROs and Non-Performance Difference payments. Likewise, there is no apparent transfer from learnings relating to the treatment of participants with regard to Balancing Modification 02_21 and the flagging out of cash out.

The Localisation Issue is not Adequately addressed

The localised nature of scarcity creates enormous difficulty in targeting a pricing solution, given that SEM pricing is on an All-Island basis. It is inappropriate to introduce a regional/constraint based provision which affects pricing on an All-Island basis. This is highly relevant to considerations of the options presented.

Balancing Market Code of Practice Compliance

We note that Scarcity Pricing proposals would not be BCOP compliant.

1.2.4 Any Change (though not justified) could not be made without Effective Secondary Trading Capability

It would be inappropriate to adjust existing arrangements in the absence of capability to conduct effective secondary trading.

Blockages are:

The lack of available volumes for units needing to Purchase Capacity

i) The load following factors are running at 0.973 for 18 of the 27 periods for the 12 months 1st October 2023 to 30th September 2024. This demonstrates the extreme lack of market liquidity and the lack of offsetting availability from other generators to sell/deliver capacity volumes. High load factors, in the absence of ii) below, mean very thin volumes lying between the de-rated capacity and the load following capacity for those willing to sell.
ii) Absence of platform to allow secondary trading of capacity volumes in excess of the de-rated capacity. This capability is promised for some time, and for trades to be performed at a timely resolution.

1.2.5 Likewise, it would totally increase the risk to the participant to introduce any change ahead of delivery of the full Schedule and Dispatch workstream.

As mentioned, the potential exposure to Battery storage participants, in particular, is not known at all (short of being capped at the Stop Loss limit). Based on questions/discussion at the recent S&D update workshop[3] there would be issues arising.

1.3 Preface to Consideration of the Three Options Presented

Commentary below is without prejudice to our stated positions that a) we do not see evidence that additional scarcity pricing is required and b) consequently we do not support any of the options presented.

1. As mentioned, we recognise that the localised nature of scarcity creates enormous difficulty in targeting a pricing solution, given that SEM pricing is on an All-Island basis. However, it is inappropriate to introduce a regional/constraint based provision which affects pricing on an All-Island basis. This is highly relevant to considerations of the options presented.

2. Protect the Consumer by Allowing participants to reduce scarcity in the Ex-Ante market rather than the Balancing Market (at a juncture if and when additional Scarcity Pricing IS required; for clarity, that is not the present)
   Timing is a key issue which many respondents picked up on in the previous consultation.
   Providing market participants with improved transparency, forecasting and predictability of data in a more timely fashion would have a greater impact by allowing parties to react to scarcity prices in the market. We believe that improved transparency and information would be an initial positive step to provide increased capability to reflect scarcity in the Ex-Ante Markets where participants can manage their positions in an effective manner, thereby reducing their risk and effectively behaving to counter system tightness. The counter to this is increased triggering of ASP which would feed into higher customer bills as the Reliability Obligation design provides no hedge up to the strike price and beyond that there is the 'hole in the hedge' that the RAs have consistently raised concerns about. Also an Ex-Ante approach would reduce costs to the consumer arising from increased collateral, etc.

3. The Volumes included in Short Term Reserves should reflect the Timing of the Pricing Signal
   Given that the pricing signal is currently in the Balancing market which is resolved at 5 minute intervals it does not seem appropriate to exclude Short term reserves, such as TOR2 (5 minutes to 20 minutes) from the calculation of qSTR(Short Term Reserves).

4. The beneficial value of Interruptible load, explained below within consideration of option 1, should be fully factored into qSTR volumes. This applies regardless of whether qSTR is actually focussed on reserve scarcity or on availability/adequacy.

1.4 Consideration of the Three Options Presented

We follow with Consideration of the Options Presented within the Consultation – none of which we are in the position to support – given our position that we do not see evidence that there is a benefit to change existing ASP arrangements.

[3] Scheduling & Dispatch – Industry Workshop; SEMO Team 6th Sept '23

Our opening Comment is that Options 1, 2a and 2b look to be designed so as to simply generate an increased number of ASP scarcity events – by empirical adjusting the components of qSTR (Short Term Reserves), the multiplier, and jurisdictional application of Operating Reserve Requirement (ORR).

	Existing	Option 1	Option 2a	Option 2b
qSTR Short Term Reserves	TOR2 + RR + Interruptible Load All-Island	~~TOR2 +~~ RR + ~~Interruptible Load~~ AI-Island	TOR2 + RR + Interruptible Load NI & Irl Separately	TOR2 + RR + Interruptible Load
qOOR (operating requirement Qty - Largest Single Infeed (LSI)	All Island	All Island	NI – LSI Ireland - LSI	qORR x 2
Jurisdiction – Pricing	All Island	All Island	All Island	All Island

a) Existing Arrangements – description

Basis: All Island
-qSTR includes Short Term Reserves (TOR2 – 5 mins to 20 mins), plus Replacement Reserves (RR – 20 mins to 4 hrs) plus Interruptible Load – mostly Batteries (c.200MW in Ireland and 100MW in NI)

-ORR Operating Reserve Requirement is the Largest Single Infeed on the Island

<u>Options 1, 2a and 2b are deeply flawed</u>

b) Option 1 removes both TOR2 and Interruptible load from the qSTR Short Term Reserves volume calculation. This proposal is flawed in removing a short-term response (TOR2) from short term reserve volumes, given that the short-term related price signal arising from the Balancing Market is short term by design, being calculated on a 5 minute basis. This removal would create an apples comparing with oranges counter intuitive situation owing to the short term price signal being solely driven by the longer term Replacement Reserves (20 mins to 4hrs).
This flies totally against the statement, within the Consultation paper that: 'The exclusion of Interruptible Load is in keeping with the rationale of focusing on reserves that may provide a better measure of adequacy.'
Adequacy relates to MW capacity in the ground which, as discussed is a function of project delivery from intended functioning of the CRM as well as Locational aspects; Reserve Scarcity relates to brief times when there are inadequate reserves – two completely different things. It is important that the two are not conflated, resulting in increasing risk being put at the foot of the conventional generator, plus storage/battery, etc..

Also, it makes no sense to remove Interruptible load from qSTR. From the document it appears that Interruptible Load volumes are currently factored at 200MW in Ireland and 100MW in Northern Ireland. It is most clear that the market has been flooded with 30 minute batteries and it now is the case that longer duration batteries are already establishing a significant presence. SOEF v 1.1 documents well that the plan for 2030 will see very large growth in Battery volumes, reaching >3,000MW in Ireland and c.700MW in Northern Ireland, and significantly bringing in greater than 1,000MW of 'Energy & Reserve' 2 hour duration batteries as well as longer (4 to 8 hour) duration batteries. Industry is aware of the upcoming Long Duration Energy Storage (LDES) Competition and the continuing drive towards longer duration batteries. The increasingly positive contribution from Interruptible load needs to be recognised dynamically within the qSTR volumes – in consideration of very short-term reserves as well as in relation to availability and adequacy.

c) Option 2a is based on a jurisdictional shortage in Ireland/Northern Ireland – relating to the LSI in that jurisdiction triggering an ASP for the Island as a whole. So, it proposes splitting the signal between jurisdictions

for a balancing pricing which takes in the whole island. This is like comparing Apples with Oranges and is totally inappropriate.
There is no apparent transfer from learnings relating to the treatment of participants with regard to Mod 02_21 and the flagging out of cash out. Nor is there recognition of the new North-South Interconnector.

d) Option 2b is a random doubling of the qORR – but without any supporting rationale supporting the quantum of the multiplier. It seems to be simply a multiplier which tightens the gap towards triggering ASP. It is positive in recognising the limited scope of Option 2a in that there are additional constraints across the island which may make it unfeasible for some reserves, which appear to the market to be available, to respond to a shortage of reserves in another location. It looks to be a progression from Option 2a, recognising that while Option 2a aims to address one of these constraints in a targeted way, that it is not possible to account in this same way for all individual constraints across the system`.
A significant concern with this option is that the 'doubling' quantum could be adjusted and used as a lever to generate any number of ASP Scarcity events, without rationale.

2.0 Consideration of Solutions

We do not see evidence of benefit from change, and hence none of the Options are suitable. However, we offer the following in relation to future design:-

1. Whenever there is a time when the redesign of the ASP is justified, it would be more efficient for the Consumer for the reference market to be the Ex-Ante market vs Balancing Market as is the case in other jurisdictions.
2. Interruptible load – its increasing contribution to qSTR arising from increasing storage volumes needs to be recognised.
3. There is no reason for excluding TOR2; Short term reserves match the Balancing Market pricing signal.
4. Option 2a volume signals in either jurisdiction, Ireland/Northern Ireland, should absolutely not be used to drive ASP trigger on the whole Island – to the cost to the Consumer.
5. Option 2b presents a random doubling of qORR. Our view that there is a misguided focus on triggering more ASP scarcity events.
6. Any proposed change requires, in advance:
   i) a full benefit analysis justifying the change
   ii) a full Impact assessment as described, starting with Conventional generation, and Storage/Batteries given their increased presence and growth in the market.
7. Definitely no change ahead of full deployment of the Scheduling and Dispatch workstream.
8. Definitely no change in advance of full deployment of the Secondary Trading Platform.
9. Design for the future, being sure to factor full impact from all Interconnectors, as well as of increased storage volumes – beyond what is in place today.