
Integrated Single Electricity Market

Capacity Remuneration Mechanism (CRM) Reserves Consultation Paper SEM-18-159

Consultation Response from



November 2018

1 Context & Recommendations

Context:

Bord na Móna welcomes this opportunity to respond to this important consultation.

We have expressed our high level views in previous consultation responses about:

- Our recognition of the importance to the RA's of security of supply, especially in the context of the dynamic nature of increasing demand going forward driven by datacentres, electric vehicles, the electrification of heat, etc.
- The need for those existing and new facilities, which are valuable to the RA's, to be remunerated to a sufficiently financially viable degree – being conscious of the limited revenue pool across Energy, Capacity and Ancillary services. We are also keen to support DSUs and aggregators. There has to be an investor case.
- Our recognition of the transitional journey in getting from where the generation, demand side, ancillary services landscape is now to where it needs to get to support higher levels of SNSP.

A contextual recommendation is to advocate a no regrets approach which allows a sustainable supply delivery model for both the System Operator and the Supplier/service Provider, while ensuring value to the consumer.

Recommendations:

Our most fundamental recommendations are for the RAs/SOs:

- i) to ensure supply security by the provision of adequate levels of reserves
It is abundantly clear that given increased demand forecasted by the TSO and the inherent uncertainty in same (all the more so given the four year lead time for T-4 CY2022/23) allied to the unreliability of the interconnectors potentially exacerbated post Brexit, as well as the relative lumpiness of supply (given the relatively small marketplace), that there is a need for a substantial capacity buffer.
- ii) to adopt the top down approach set out in Option 2b)¹; delivering largely on simplicity and transparency criteria – bearing in mind that it is considerably less costly to have surplus capacity (Expected Unserved Energy priced at the BNE price), than to have a shortage, which is priced at the considerably higher Value of Lost Load (VOLL).
- iii) to ensure that whatever agreements are made with parties and noting the statutory obligation on the RA's, be they in the form of LRSA's or other, are transparent and fair.
It is vital that there is an open and transparent process to the extent that other parties are not disadvantaged by a party (with an agreement) significantly impacting the market landscape. Put more clearly, we are concerned that parties with arrangements may be in an unfair position to influence energy prices, thereby distorting the underlying market, to the detriment of participants and the consumer.
- iv) Lastly we re-inforce the point made above that there is a journey to be taken in delivering the desired solution. In addition to the displacement issue for T-4 CY2022/23 regarding the changeover to Auction format C from format B², the current context is that there is a clear threat to existing assets which may financially expose them ahead of the availability of new

¹ Option 2b): Top down allocation pro-rata to Minimum MW (as calculated according to the current methodology)

² We have set out in the BnM response to SEM 18 028 (CRM Parameters for T-4 2022/23 Capacity Auction) that the State Aids document appears to be reluctant in its support for Auction format C (displacement) and that the established principle of legitimate expectation and supply security might allow a reversion to Auction format B (additionality) given concerns expressed in para 49 and para 152 of the SADs document

technologies and services, which could threaten grid supply security, RES targets and overall consumer welfare. Likewise the degree of revenue uncertainty places a significant risk of under investment for new technologies and services.

The key recommendation is to take a prudent approach by transitioning from existing to new technologies/suppliers at a pace such the existing technologies/suppliers will underpin this transition by adding much needed security of supply – rather than going for the perfect solution day 1, risking load shedding, shortfall in RES attainment, reputational damage and increased costs for the consumer.

2 SUMMARY OF CONSULTATION QUESTIONS

2.5 CONSULTATION QUESTIONS

2.5.1 **Question 1:** Do you agree with the proposal to include reserves in Locational Capacity Constraint Area minimum MWs for the T-4 CY2022/23 capacity auction? Please explain.

We agree; the proposal to include minimum MW reserves in Locationally Constrained Areas for the T-4 CY2022/23 capacity auction is well founded.

- It ensures levels of local security of supply at LCCA and at all-island level, and
- The ‘reserves approach’ ensures consistency with the direction of travel of EU policy at the all-island level, and, by extension addressing local requirements
- CY2022/23 is 4 years away and while there is inherent uncertainty over future demand³ current TSO forecasts point towards substantial demand growth
- There remains a significant challenge before assurance that transmission capacity constraints in Level 1 areas of Ireland & Northern Ireland and Level 2 Greater Dublin will be resolved, and as noted previously, the incentives on the parties best resolved to remove these constraints may need to be realigned. Currently, the SEM arrangements ensures that there is sufficient - capacity in Northern Ireland, without SEM noting the potential negative impact of Brexit, the outlook for a secure power supply is less assured.
- Furthermore, the fact that Ireland is an outlier operating to a lower LOLE standard (8 hours vs 4 to 5 hours in many EU countries) translates into an inherently less secure supply situation currently prevailing⁴ which can be mitigated by reserves
- Lack of real visibility of Interconnector reliability adds to concerns about reserve adequacy. From the indicative results set out in 8.1.13 of the paper it is apparent that a small change in forced outage rates has a very large influence on External Market Derating Factor (EMDF)

³ Ref recent upward revision in demand forecast within the recent Generation Capacity Statement

⁴ This recognises moves to harmonise the definitions of the Capacity Requirement (CR) across the EC as well as acknowledgement that not even the ‘theoretical’ 8 hour LOLE standard will be achieved in practice unless at least some proportion of the operating reserve requirement is included in the CR. Naturally this point becomes all the more pointed/acute in consideration of Ireland’s benchmarked capacity requirement vs other EU countries which have much greater cross border interconnection, and therefore greater supply security. We note from the international benchmarking study that of the 9 countries with an explicit LOLE that 5 have a tighter standard (less than 8 hours) and that the only market with which the I-SEM is directly connected to, GB, has a tighter standard, at 3 hours LOLE. The I-SEM 8 hour standard is acknowledged as not being as tight as most markets in the same regional co-ordination zone (CORESO), including GB, Belgium and France, which countries, despite enjoying considerably higher cross border connectivity than Ireland, all employ a 3 hour standard.

values, where a 7% and 10% assumptions for forced outage rates in GB yielded a range of EMDF between 32% to 95%. The implication is that overall interconnector de-rating values will have a large spread and a selection of one value seems to be somewhat unrepresentative⁵. With this evidence, there is an obligation on the RA's to adapt a prudent approach when assessing the potential impact on Ireland's security of supply and LOLE in terms of the 'value' of Interconnector reliability, and the associated contingent reserve capability which can mitigating this obvious and clear risk.

- It is abundantly clear that given increased demand and uncertainty in same (all the more so given the four year lead time in the case of the T-4 2022/23 auction) allied to the unreliability of the interconnectors, as well as the relative lumpiness of supply (given the relatively small marketplace), that there is a need for a substantial capacity buffer.

2.5.2 Question 2: If reserves are to be included across the Locational Capacity Constraint Areas, which of the above approaches (or other approaches do you favour and why)?

This question is presumably in relation to the T-4 CY 2022/23 auction.

We see merit in approach option 2b)⁶, noting the RA's statutory obligations for transparency, in contrast to the 'bottom up' approach (option 1) which looks to be favourably considered by the RAs even though the paper itself concedes that 'given time constraints it is unlikely that much more detailed analysis can be completed before the CY2022/23 auction, and it may be necessary to implement a bottom-up approach using some 'rules of thumb'.'

This degree of looseness would surely create investor uncertainty, disquiet among industry participants and additional costs on consumers. A potential investor could look at this as well as the LRSAs which are in the market place and decide not to invest because of lack of transparency translating to uncertainty of the competitive positioning of their investment.

A minimum condition for such lack of transparency would need to be that those operating to such agreements which are opaque to the market place would not be in a position to determine market prices (such as may be happening in the energy market in I-SEM).

Bord na Móna favour option 2b) over 2a) for it is based on the current minimum MW methodology.

That said, we note nonetheless in 2.4.3 of the consultation paper that the RAs envisage having the power to use their discretion to purchase less or more than the amount determined under any of the options, reflecting load growth, outages, etc. In the first instance, this 'ad hoc' approach of regulatory intervention, could be seen as the root cause, as to why after a capacity auction, it was necessary to contract 3 no. LRSA, again to the detriment of the consumer. However, if this principle of regulatory activism is advanced, it would very much be the hope of most industry players that any 'rule of thumb' or actions relating to use of discretion are carried out in consultation with the industry in as open and as transparent manner as is reasonably possible – in line with normal commercial expectations and practices.

⁵ Furthermore we are surprised, given the historical higher outage rates (forced and scheduled) for the interconnectors for CY2022/23 vs CY2018/19 that the EMDF values are the same. Lastly, we observe that the Estimated Forced and scheduled outage rates for CY2022/23 are less than those for the CY2019/20 estimate with no reserve⁵ - with no apparent explanation.

⁶ Option 2b): Top down allocation pro-rata to Minimum MW (as calculated according to the current methodology)

3.4.1 **Question 3:** Do you agree with the proposal to include reserves in the forthcoming T-1 capacity auction for CY2019/20? Please explain.

Yes – we do, for very similar common reasons as we set out in our same response to Question 1.

- The approach ensures consistency with wider EU practice on the treatment of reserves in adequacy assessments recognising moves to harmonise the definitions of the Capacity Requirement (CR) across the EC
- Furthermore, the fact that Ireland operates to a lower LOLE standard (8 hours vs 4 to 5 hours in many EU countries) translates into an inherently less secure supply situation currently prevailing⁷
- There remains significant uncertainty around the effects of Brexit. The SEM itself is threatened. There will be under-capacity in Northern Ireland without SEM, with further potential complications arising from the full impact of Brexit.
- Lack of real visibility of Interconnector reliability adds to concerns about reserve adequacy. We note the EMDF (external market re-rating factor) for the Interconnectors being set at the singular rate of 60%. Given the sensitivity of EMDF to outage rates (ranging from 32% to 95% from small changes in outage rates, of just 7% to 10%) there is a clear need for this to be reflected into the measured impact on Ireland's security of supply and LOLE, and the associated contingent reserve capability.
- It is abundantly clear that given increased demand and uncertainty in same allied to the unreliability of the interconnectors, as well as the relative lumpiness of supply (given the relatively small marketplace), that there is a need for a substantial capacity buffer.

We do not support the claim in 3.5 of SEM 18 030 that cites, under SEM 16 082, that a reserve requirement will not be included in the methodology for the T-1 transitional auctions. Our belief is that SEM 16 082 refers to the first transitional auction only – thereby retaining the option for T-1 2019/20.

3.4.2 **Question 4:** Do you agree with the view that the case for including significant reserves in the all-island demand curve is relatively weak?

No, not in an environment where there is considerable uncertainty over demand levels² as well as parallel uncertainty over the performance of the Interconnectors, the impact of Brexit, the slow delivery of transmission assets & reinforcements, and the inherent lumpiness of this isolated island system.

Regarding the Interconnectors we refer to our response to Question 1.

'Lack of real visibility of Interconnector reliability adds to concerns about reserve adequacy. We note the EMDF (external market re-rating factor) for the Interconnectors being set at the singular rate of

⁷ This recognises moves to harmonise the definitions of the Capacity Requirement (CR) across the EC as well as acknowledgement that not even the 'theoretical' 8 hour LOLE standard will be achieved in practice unless at least some proportion of the operating reserve requirement is included in the CR. Naturally this point becomes all the more pointed/acute in consideration of Ireland's benchmarked capacity requirement vs other EU countries which have much greater cross border interconnection, and therefore greater supply security. We note from the international benchmarking study that of the 9 countries with an explicit LOLE that 5 have a tighter standard (less than 8 hours) and that the only market with which the I-SEM is directly connected to, GB, has a tighter standard, at 3 hours LOLE. The I-SEM 8 hour standard is acknowledged as not being as tight as most markets in the same regional co-ordination zone (CORESO), including GB, Belgium and France, which countries, despite enjoying considerably higher cross border connectivity than Ireland, all employ a 3 hour standard.

60%. Given the sensitivity of EMDF to outage rates (ranging from 32% to 95% from small changes in outage rates) there is a clear need for this to be reflected into the analysis in terms of a measured impact on Ireland's security of supply and LOLE and the associated contingent reserve capability.'

In addition, regarding the reserve quantum, the inclusion of transmission constraints in the CY2018/19 auction led to the award of an additional 525MW out of merit ROs in Dublin and Northern Ireland.

In comparison, we would therefore select 500MW as the appropriate level of operating reserve (the maximum target operating reserve requirement) as being most appropriate, based on this quantum representing the largest single infeed from EWIC at times of scarcity, ie, when it is needed most.

3.4.3 Question 5: If reserves are to be included across the Locational Capacity Constraint Areas, which of the above approaches (or other approaches do you favour and why)?

This question is presumably with reference to the T-1 CY 2019/20 auction. Our response to this is very similar that already set out in response to Question 2.

We see merit in approach 2b), largely for transparency reasons in contrast to the 'bottom up' approach (option 1) which looks to be favourably considered by the RAs even though it is declared in the paper that it may be necessary to implement a bottom-up approach using some 'rules of thumb'.

This degree of looseness would surely create investor uncertainty and disquiet among industry participants. A potential investor could look at this as well as the LRSAs which are in the market place and decide not to invest because of lack of transparency translating to uncertainty of the competitive positioning of their investment.

A minimum condition for such lack of transparency would need to be that those operating to such agreements which are opaque to the market place would not be in a position to determine market prices (such as may be happening in the energy market in I-SEM).

We favour 2b) over 2a) for it is based on the current minimum MW methodology.

That said, we note nonetheless in 2.4.3 of the Consultation paper that the RAs envisage having the power to use their discretion to purchase less or more than the amount determined under any of the options, reflecting load growth, outages, etc. This being the case it would very much be the hope of most industry players that any 'rule of thumb' or actions relating to use of discretion are carried out in consultation with the industry in as open and as transparent manner as is reasonably possible – in line with normal commercial expectations and practices.

3.4.4 Question 6: Are there reasons to use different approaches for the CY2019/20 T-1 auction and the CY2022/23 T-4 auction? If yes, please explain.

There are a number of considerations which could be taken into account:

- i) Less transmission constraints are forecast by the CY2022/23 auction, however it has been stated that delivery is running behind the planned schedule.
- ii) Generally speaking there should be more visibility regarding entrants, exits and outages for the T-1 auction than for the T-4. Untypically this may not be the case this time around given recent CRU determinations re Dublin Security of Supply and Dublin Region Level 2 Locational Capacity Constraints for the upcoming T-4 Capacity Auction.

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- iii) Most efficient solutions will be found for T-1 auctions as participating parties have greater visibility of their own 'missing money' used to determine their RO bids.
 - iv) CY2022/23 will be operating under Auction format C (displacement) while CY 2019/20 will be under format B (additional).

Given the current set of circumstances we see little reason to use different approaches between the two auctions, thereby recommending the option 2b) approach for both auctions. We do however recommend greater provision for locational capacity and associated reserves for the T-4 auction, not conceding that the reserve level should be less than circa 350MW in the T-1 auction.

We hope that you find these comments of use and submit them for your consideration. We would be pleased of course to discuss any aspect of our responses should you so wish.

For and on behalf of Bord na Móna



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